





Department of Water Resources

BULLETIN No. 149-74



CLAIRE T. DEDRICK Secretary for Resources The Resources Agency EDMUND G. BROWN JR.

Governor

State of California

RONALD B. ROBIE

Director

Department of Water Resources

Digitized by the Internet Archive in 2011 with funding from Kahle/Austin Foundation and Omidyar Network

# STATE OF CALIFORNIA The Resources Agency

# Department of Water Resources

BULLETIN No. 149-74

PROJECT

MAINTENANCE

AND

REPAIR

# 1974 INSPECTION REPORT

Copies of this bulletin of \$1.00 each may be ordered from:

State of California
DEPARTMENT OF WATER RESOURCES
P. O. Box 388
Socromento, California 95802

Moke checks poyoble to STATE OF CALIFORNIA Colifornia residents odd soles tox.

DECEMBER 1975

CLAIRE T. DEDRICK Secretary for Resources The Resources Agency EDMUND G. BROWN JR.
Governor
State of California

RONALD B. ROBIE

Director

Department of Water Resources



#### CONTENTS

Organization, Department of Water Resources	
LEVEE MAINTENANCE	
MAINTENANCE PROBLEMS	
AREAS WITHOUT MAINTENANCE DISTRICTS	
AREAS ORDERED BY THE RECLAMATION BOARD TO IMPROVE THEIR MAINTENANCE 12	
AREAS OF NEEDED MAINTENANCE IMPROVEMENT	
LEVEE INSTABILITY	
LEVEE ENCROACHMENTS	
LEVEE CONSTRUCTION	
FLOOD CONTROL PROJECT STRUCTURES	
CHANNEL MAINTENANCE	
<u>Tables</u>	
1 Summary of Maintenance Ratings by Project 6	
2 Summary of Overall Maintenance Ratings	
3 Twenty-Year Levee Maintenance Record, 1955 - 1974 18-	19
4 Project Levee Maintenance on Sacramento Valley Streams in 1974 20-	24
5 Project Levee Maintenance on San Joaquin Valley Streams in 1974 25-	27
6 Project Levee Maintenance on Miscellaneous Streams in 1974	
7 Levee Construction, 1974	-29
8 Flood Control Project Structures, 1974	-32
9 Channel Clearance and Condition, 1974	
<u>Map</u>	
Sacramento and San Joaquin Rivers Flood Control Project; Project Works and Maintaining Agencies, 1973-1974	at



# STATE OF CALIFORNIA Edmund G. Brown Jr., Governor

THE RESOURCES AGENCY Claire T. Dedrick, Secretary for Resources

DEPARTMENT OF WATER RESOURCES
Ronald B. Robie, Director
Robin R. Reynolds, Acting Deputy Director

#### CENTRAL DISTRICT

Wayne Ma	cRostie		•	•	٠	•		•		. Ch	ief	, Cer	tral	Di	strict
Willard	R. Slate	er.		٠				4		. Chi	ef,	Oper	atio	ns	Branch
John F.	Wright,	Jr.	•		٠	(	Chi	ef	,	Flood	Co	ntrol	Sur		llance ection

# This report was prepared under the direct supervision of

John MacClanahan . . . Water Resources Engineering Associate

#### by

Jerry Piazza		•	•	٠	•	•	Water Resources Technician II	
Ron Quinn					٠		Water Resources Technician II	
Wavne Wolber							. Water Resources Technician I	

Table I. SUMMARY OF MAINTENANCE RATINGS BY PROJECT

Project	Levee and Pank Fro- tection Miles		in d l	
'a ramento Fiver and Tributarie: Flood Control		93	7	0
American River Jan Josquin River & Tributaries Jalaveras River, Bear Creek, Littlejohns Creek	8.3	10		
% Tributari s	1 (4.4)	1100		
Merged Courty Stream Group Fresho Courty Stream Group	6.3	100		
Middle ('ro k, Lake County	14.3	110)		
Lower Ban Jusquin Flood Control	141.		5	
Fings River Flood Control	115.5		***	
Total	1,671.2	P.		

<sup>&#</sup>x27;in ludes area, where there is only bank protection.

Table 2. SUMMARY OF OVERALL MAINTENANCE RATINGS

Maintainin: Agerry	Ra· 'ı
entropy its of Marysville, State of Shifornia ("anhe Treek, Wadaworth Canal, Stater Bypass, West Lever n le Bypass, set Levee Yolo Bypass	Outstand
Leves Districts No. 1, 7, Glenn County; 1 and 9, Sutter Sound.	Good
I clamation Districts No. 1, 3, 10, 17, 70, 10, 10, 341, 553, 511, 36, 27, 51, 24, 553, 755, 777, 784, 586, 767, 811, 67, 50, 100, 1001, 1002, 1001, 1502, 166, 561, 565, 565, 565, 565, 566, 511, 667, 565, 566, 511, 667, 566, 511, 667, 511, 667, 5104	
Moderican River Flood Control District Francan-Andrec Levee Maintenance District it, of Sacramento it, of Sacramento it, ten. How out Area Fred.c County Stream Group Lings River Flood Control District (Kings River) Enights Landing Ridge Drainage District Lake County Flood Control District Lower San Joaquin Levee District Morrord County Stream Group Haber County (Truckee River) Sacramento River West Side Levee District San Joaquin County Flood Control District Ctate of 'alifornia (Sacramento River East Levee, West Leve Forther River, Sacramento Rypass, Tisdal- Rypass, Futable Fan. Willow Slough Pypass)	
State of California (Maintenance Areas No. 1. j. 4. 4, 4, 4, 4, 4, 4, 4).	
Levee District No. 3, Glenn County R demation Districts No. 307, 349, 404, 404, 456, 764, 2003, 404 (Solenn County (Yole bypazz) Tehama County Flood Control District	Fair
	Pour

#### LEVEE MAINTENANCE

Each spring and fall since 1947, the Department of Water Resources has rated the quality of maintenance on flood control levees and channels operated under cooperative state and federal agreements in the Sacramento and San Joaquin Valleys and in Lake and Placer Counties. The current fall ratings are summarized in Tables 1 and 2. The consecutive annual ratings for the past 20 years are summarized in Table 3. Tables 4 and 5 show the quality of levee maintenance during the most recent fall inspection and the progress made since the previous spring inspection.

On completion of the spring and fall reports, Department personnel, together with representatives of each local agency for levee maintenance, inspect the project levees, discuss maintenance regulations, and study levee areas urgently needing repairs. Agency representatives receive inspection sheets listing work required to bring the levees into compliance with federal regulations.

Maintenance ratings pertain only to maintenance performance and not to the stability of the levee.

Outstanding maintenance work is in complete accord with federal regulations.

Good maintenance work varies only in minor instances from federal regulations.

Fair maintenance work, although generally acceptable, varies considerably from federal regulations.

Poor maintenance indicates that little or no maintenance work has been performed and that the agency is not fulfilling its maintenance obligation. It does not necessarily imply impaired levee stability.

Some examples of poor maintenance are (a) failure to add gravel where needed and to shape crown roadways for proper drainage during wet weather; (b) failure to remove improperly sealed abandoned pipes, inoperative pipes, and leaky pipes; (c) failure to eliminate unauthorized grazing and vehicular traffic; (d) failure to burn, spray, or mow grass and weeds, and (e) undesirable growth on levee slopes and rock revetments. Spring or fall spraying with selected herbicides and late summer burning will remove such growth and permit detection and repair of burrow holes, caves, sloughing, and types of damage not readily visible.

Maintenance ratings are based on the following 12 factors:

#### 1. District Maintenance Program

Has the agency initiated a definite maintenance program with a set budget? A properly maintained district establishes such a program and budget each year.

#### 2. Readiness for Flood Emergency

Has the agency organized a definite plan to combat a flood situation effectively? Has one person been appointed to supervise and to carry out the plan?

Does the agency stockpile such standard floodfighting equipment as sacks, burlap, canvas, and hand tools? Does it have access to portable radios for communication during levee patrolling? Only a permanently operating organization, properly equipped, can make repairs and direct supplementary forces during emergencies.

#### 3. Adequate Levee Section and Grade

Does the levee system meet section and grade standards? Design standards are based on experience gained from levee construction on the Sacramento and San Joaquin Rivers flood control projects.

Levee design standards are summarized as follows: All crowns are no less than 20 feet wide along the Old Sacramento River, Yolo and Sutter Bypasses, major Sacramento River tributaries, and the downstream portion of the San Joaquin River and Paradise Cut.

All crowns are no less than 12 feet wide along minor Sacramento River tributaries; Old River; Bear Creek; and the Eastside, Mariposa, and Chowchilla Bypasses.

All landward slopes are 1:2; all waterward slopes are 1:3. All freeboard is 3 feet, except along bypasses. Freeboard is 4 feet along the Eastside, Mariposa, and Chowchilla Bypasses, and 5 feet along the Yolo, Sutter, Colusa, Tisdale and Sacramento Bypasses.

# 4. Adequate Encroachment Control

Has the agency tried to prevent establishment of unauthorized encroachments or tried to remove existing unauthorized encroachments? Each agency must prevent the erection of structures on, additions to, or alterations of the levee, unless authorized by permit from The Reclamation Board.

This ruling is a part of both state and federal regulations. Before work begins on any excavation, building, pipeline, poleline, or other structure in, under, on, along, or near any

levee or any related fill, berm, overflow or flood area, the districts, agencies, and individuals must file with The Reclamation Board an application in triplicate, complete with construction plans, and receive a board order authorizing such work. Failure of an agency to control unauthorized encroachments will increase the cost of maintenance and threaten the integrity of a levee.

#### 5. Control of Wild Growth

Has the agency cleared all willow, elderberry, locust, bamboo, and other wild or undesirable growth from both slopes and rock revetment?

Leaning trees or those with exposed roots are a hazard to the safety of the levee. Wind and wave action cause the larger growths to pull at their root systems, disturb the soil or rock revetment, and sometimes uproot themselves, thereby accelerating erosion. Fallen trees accumulate drift and direct erosive currents against the levee banks. The sheltering roots of large trees attract burrowing animals. Brush growth prevents proper inspection or detection of trouble spots. Removal of trees and brush promotes the growth of a sod with pliable roots that bind the soil.

#### 6. Rodent Control

Has the agency established an effective program for exterminating burrowing animals? Do maintenance crews periodically inspect levee slopes to exterminate rodents? Contrary to general belief, burrowing rodents can and do infest sand levees as well as those composed of heavier soils. Many of the sand levees, indeed, consist of a sand cover topping an older soil levee. Some of the older pipe structures, especially those without cutoff walls, permit rodents to excavate noncaving burrows immediately under the pipe. To ensure the safety of the levee during flood periods, burrowing animals must be exterminated persistently. Their eradication is an extremely difficult task that can be accomplished only by constant effort. A levee cleared of vegetation makes it easier to perform this work. Care should be exercised to avoid poisoning birds and other desirable wildlife.

### 7. Repair of Cracks, Burrows, Rainwash

Has the agency made all the necessary repairs to cracks, burrows, or rainwash damage on the levee slopes? Such damage endangers levees.

# 8. Repair of Erosion and Caving

Has the agency repaired eroded and caved areas along banks and levees? Early repairs of damaged areas eliminate the necessity of major bank protection work and levee repair later on.

#### 9. Condition of Rock Revetment

Has the agency controlled or removed wild growth from the revetment? Has the agency repaired areas where the revetment has been displaced or damaged?

Although damage to existing revetment works is rare, that which has occurred results chiefly from lack of maintenance. Control of growth is important because trees and brush can damage or displace revetment. Early detection and prompt repair of damage will reduce restoration costs. Often a simple rearrangement of stones or cobbles will produce the desired result. Occasionally, additional rock must be placed at damaged locations.

#### 10. Condition of Crown Roadway and Gates

Has the agency shaped the crown roadway to provide proper drainage during wet weather? Have ruts been filled and has gravel been added to provide proper access at all times for maintenance, patrolling, and floodfighting vehicles? Are all gates maintained and repaired to control access by unauthorized vehicular traffic?

A roadway unusable either for normal maintenance or for floodfighting prevents early detection and repair of levee damage and thus threatens the entire levee system.

#### 11. Control of Livestock Grazing

Has the agency properly controlled unauthorized stock grazing on the levee slopes and insured repair of any stock-damaged sections?

This is the most controversial of the regulations. Use of a levee for grazing is not a proprietary right. When permitted, it should be carefully watched. It should be tolerated only under the control (by permit) of the responsible district authority. Those who abuse the privilege may be barred from so using a levee. The local district is responsible for repairing a levee damaged by over-grazing.

# 12. Condition of Pipes (if applicable)

Do debris and other obstructions prevent proper operation of the pipe? Does the pipe show evidence of damage, settlement, or rust holes? Is the metal sound? Do all gates and valves operate properly? Have cracks occurred in the headwalls? Does erosion adjacent to the pipe endanger water tightness or stability of the structure?

Each structure situated through, in or on the levee should be examined for stability at least once yearly. All component parts should be examined for effectiveness of operation and

reliability. New structures should be installed or older structures repaired only in accordance with adopted standards and under the supervision of qualified personnel. Defective structures should be repaired, replaced or removed immediately.

#### MAINTENANCE PROBLEMS

The recent emphasis on air pollution control has resulted in state laws and county ordinances which control or prohibit open burning. The state law that designates "burn days" restricts open burning of brush and weeds on the levee slopes and crown. The county ordinances differ and in some cases practically eliminate the possibility of removing obnoxious materials from the levees by burning. These effects are particularly noticeable in Sacramento, San Joaquin, Placer and Fresno Counties.

An unforeseen by-product of air pollution control is the dumping of household trash and garbage along the levees and streambanks. This results from the inability of residents of large metropolitan areas to dispose of their refuse by open burning in backyard incinerators. They therefore resort to disposing of such refuse by dumping it along the levees.

Control of obnoxious wild growth, by the use of herbicides, is coming under attack by the ecologists. Already the use of the brush killer 2-4-5-T has been prohibited along the levees and streambanks and the large acreages being planted to grape vineyards is restricting the practical use of the "Broad Leaf Killer" 2-4-D, and it is probable that other herbicides will be withdrawn from use, or restricted or regulated so that their use becomes impractical.

The Corps of Engineers is now either leaving wild growth on the levees and berms or planting shrubs and trees. The Corps of Engineers now condones the growth of trees to a diameter of 2 inches in the rock revetment along the streambanks.

With all of these problems, which require changes in maintenance procedures, there has been no corresponding change in the Corps of Engineers' Manual of Standard Operations and Maintenance of the Flood Control Projects. The manual is the basis for the ratings in this bulletin, and the Department of Water Resources has no authority to change, modify or relax the maintenance requirements for the various flood control projects until such changes are sanctioned by a revision of the manual.

#### AREAS WITHOUT MAINTENANCE DISTRICTS

Only one area remains within the Sacramento and San Joaquin Rivers flood control project which lacks a local organized district.

#### Eastern Honcut Creek Area

In this area, 1.49 miles of levee reconstructed by the U. S. Army Corps of Engineers extends easterly along the left bank of Honcut Creek from the Western Pacific Railroad tracks to high ground.

The local landowners maintain this levee in "good" condition and in general conformance with federal and state regulations. However, there is no organization to contact regarding floodflows or to undertake a floodfight if necessary.

# AREAS ORDERED BY THE RECLAMATION BOARD TO IMPROVE THEIR MAINTENANCE

During October 1968, Reclamation Districts No. 307 and 349 were requested to appear before The Reclamation Board to discuss their maintenance deficiencies. The Board requested each district to submit a written, multi-year program to bring their maintenance to acceptable standards.

The annual spring inspection of 1972 revealed little, if any, improvement of the maintenance within these two districts.

Therefore, the Department, under provisions of Section 12878 of the Water Code, filed a "finding of lack of maintenance" with The Reclamation Board in July 1972. On September 8, 1972, The Reclamation Board held a hearing on the formation of a maintenance area to accomplish the required maintenance within these two districts. At this meeting The Reclamation Board accepted a new maintenance program submitted by the two districts and extended the time period for the two districts to bring their maintenance up to acceptable standards. The program was established for a 5-year period with provisions for review on a year-to-year basis.

Failure to comply with their program during any year could result in the formation of a maintenance area in the offending district.

#### Reclamation District No. 307

The work done during 1973 and 1974 by Reclamation District No. 307 has not been in exact compliance with its approved program, but in quantity and quality was acceptable in lieu of the proposed scheduled work.

At the time of the 1974 fall inspection, it appeared that Reclamation District No. 307 was approximately on schedule and if the maintenance effort is continued for the remaining 3 years, the district will be in compliance with federal and state maintenance standards.

#### Reclamation District No. 349

The work done by Reclamation District No. 349 has not been in exact compliance with its approved program and at the time of the 1974 fall inspection was found to be approximately 15 percent (15%) behind schedule. The necessary work appears to be accomplished on an "available time" basis by the local district. The "available time" approach does not permit an organized and orderly maintenance effort.

It will be necessary for Reclamation District No. 349 to provide a substantial effort during 1975 to bring its maintenance effort up to schedule.

#### Reclamation District No. 544

In addition to the above, Reclamation District No. 544 was called before The Reclamation Board on April 13, 1973, to present an acceptable program to upgrade levee maintenance. On August 23, 1974, the Department, under provisions of Section 12878 of the Water Code, filed a "finding of lack of maintenance" with The Reclamation Board. On January 23, 1975, The Reclamation Board held a hearing on the formation of a maintenance area with Reclamation District No. 544.

At this meeting The Reclamation Board accepted a maintenance program submitted by Reclamation District No. 544. The program was established for a 3-year period, with provisions for review on a year-to-year basis.

At the time of the 1974 fall inspection it was noted that considerable work under the program had already been accomplished.

#### AREAS OF NEEDED MAINTENANCE IMPROVEMENT

In 1974, there was one additional reclamation district in which the quality of maintenance was rated "poor". This is Reclamation District No. 2107, which has not complied with the federal regulations, Section 8370 of the Water Code, or the assurance agreements entered into with the State of California.

Reclamation District No. 2107 (San Joaquin County Unorganized Area).

A reclamation district was formed over this area during 1972. In 1974, trustees were appointed to conduct the business of this district. During the 1974 fall inspection these trustees expressed their intent to embark on a maintenance program in order to comply with federal and state levee maintenance regulations.

#### LEVEE INSTABILITY

#### Reclamation District No. 108, Colusa Basin.

Severe subsidence first occurred in 1970-71 between levee miles 2.55 and 2.65. The levee was constructed by the Corps of Engineers in 1956. In 1972, material was added to the crown and waterward slope by the Reclamation District.

During the winter months of 1972-73, subsidence of varying depths occurred at the following locations; levee miles 1.72-1.75, 2.29-2.31, 2.60-2.72, 3.33-3.35, 3.82-3.89, 15.38-15.40, and 15.63-15.65. Several areas had subsidence of 6 to 8 feet in depth, necessitating closure and abandonment of the county road. The district placed fill in most of these areas in 1973. However, the subsidence continued and the Corps of Engineers in 1974 reconstructed the levee in the most severe areas of subsidence between levee miles 1.68-1.78 and 2.51-2.76.

### Reclamation District No. 341, Sherman Island.

Subsidence has occurred between levee miles 8.90 and 9.68, since reconstruction of the levee in 1954. In an attempt to stabilize it, new material has been placed and the levee section reshaped several times. In 1964, the Corps of Engineers enlarged and shaped the levee, placed stone protection on the waterward slope, and graveled the crown roadway. In 1969 the levee was reshaped and the crown roadway regraveled between levee miles 8.90 and 9.44. Additionally, minor remedial work was performed between levee miles 9.44 and 9.68.

The district placed fill and rock in several areas in 1974. During the 1974 inspections, subsidence of varying depths was noted between levee miles 8.99-9.02, 9.19-9.23, 9.25-9.34, 9.36-9.41, and 9.56-9.68.

# Reclamation District No. 787, Colusa Basin.

During the winter months of 1972-73, severe subsidence occurred between levee miles 2.23-2.25, and 4.16-4.18. The levee was constructed by the Corps of Engineers in 1956.

The Corps of Engineers in 1974 reconstructed the levee sections at the two areas noted above. During the 1974 fall inspection, no new levee subsidence was noticed.

#### Reclamation District No. 1601, Twitchell Island.

Subsidence has occurred between levee miles 0.51 and 1.54, since construction of the levee by the Corps of Engineers in 1954. Material has been added to the crown and landward slope from time to time. Also, rock has been placed on the waterward slope. In 1973, the Corps of Engineers placed material on the landside and crown of the levee and graveled the roadway between levee miles 0.95-1.02.

Although there is activity, the rate of subsidence appears to have lessened. During the 1974 fall inspection, subsidence of varying depths was noted between levee miles 0.51-0.55, 0.62-0.71, 0.75-0.77, 0.81-0.84, 1.14-1.20, and 1.50-1.54.

#### Reclamation District No. 2098, Cache-Haas Slough Area.

Due to the instability of the levee sections between levee miles 3.62 and 4.43, Unit No. 1, and levee miles 4.43 and 4.58, Unit No. 2, the Corps of Engineers has not transferred these sections to the State of California for operation and maintenance. Condition of the areas, both within the Corps' responsibility and within the local district's responsibility, is basically unchanged since 1971 when fill material was added to the slopes and the levee crown was reshaped.

The location and amount of subsidence are as follows:

### Unit No. 1 - Right Bank Yolo Bypass.

There has been no visible change in the location or the amount of subsidence in this unit during the past year. A total of 0.23 mile of subsidence remains between levee miles 3.46 to 4.34, varying from 0.5 to 2.0 feet below project grade.

# Unit No. 2 - Left Bank Cache Slough.

The district repaired many of the subsidence areas in this reach during 1974. However, continued subsidence of some of the repaired areas and the addition of some new areas resulted in a total of 0.74 mile of levee subsidence, approximately the same as in the fall of 1973.

During 1974 the Corps of Engineers dredged material from Cache Slough and placed it along the levee slopes between levee miles 4.49 and 4.99. The material was left in its rough condition to dry out. The Corps of Engineers plans to spread and shape this material during 1975.

Reclamation District No. 2098 is continually repairing subsiding areas but many of the repaired areas remain active and new areas are constantly appearing.

#### LEVEE ENCROACHMENTS

Expanding urban and recreational development in California has increased the number of encroachments and threatened the integrity of the flood control system of the Sacramento and San Joaquin Valleys.

In 1974 the levee and designated floodway inspection unit inventoried and categorized 2,307 encroachments on 304.8 miles of levee within Levee Districts No. 1, 2 and 3, Glenn County; Reclamation Districts No. 70, 536, 1500, 1660, 2035, 2060, 2068, 2095 and 2104; Solano County at Yolo Bypass; Yolo County at Cache Creek; East Levee Sacramento River; Tisdale Bypass; West Levee Yolo Bypass; Cache Creek and Settling Basin; Willow Slough; Putah Creek and Maintenance Area No. 1. The categorized list was approved by The Reclamation Board.

Additionally, 371 miles of designated floodway on the following streams were inspected: Ash Slough, Berenda Slough, Chowchilla River, Colusa Basin Drain, Dry Creek at Modesto, Feather River, Kings River, Merced River, Sacramento River and the Tuolumne River. This inspection resulted in an inventory of 829 additional encroachments for Reclamation Board action.

The Levee Surveillance Section reviewed 501 encroachment applications during 1974.

Section 8710 of the California Water Code requires Reclamation Board approval of all plans for encroachment. Prior to approval, the Board studies recommendations of the Department of Water Resources and the Corps of Engineers relating to engineering, maintenance, and flood control aspects of the encroachments. Following Board approval, the Department of Water Resources inspects construction to ensure conformance with the approved plans. Each local agency for levee maintenance should make every effort to police its own system to control unauthorized encroachments.

#### LEVEE CONSTRUCTION

During 1974, the Corps of Engineers, the State of California and individual reclamation districts completed levee construction and reconstruction, patrol roads, bank protection, turnouts, and channel improvement work on a number of projects. Table 7 reports this activity.

#### FLOOD CONTROL PROJECT STRUCTURES

The Department of Water Resources, during the fall of each year, inspects weirs, pumping plants, drop structures, and control structures constructed by the Corps of Engineers and the State of California as part of the flood control works. Table 8 is a summary of the present condition of each structure.

#### CHANNEL MAINTENANCE

The Department of Water Resources inspects channels and floodways of streams in the Sacramento and San Joaquin Valley flood control projects and the Middle Creek and Truckee River flood control projects to determine the amount of the channel floodway acreage cleared by the Department and others. Such inspection ensures elimination of conditions which adversely affect capacity of the channel, integrity of the flood control system, and floodflow velocities. Table 9 lists each stream, the acreage cleared during the current year and the ability of each channel to carry the floodflow satisfactorily.

#### Toble 3. TWENTY-YEAR LEVEE MAINTENANCE RECORD, 1955-1974

										ntenan											-
Maintaining Agency	Miles	55	56	57	GJ+	59	60	(Mul	t1-un1 62	t dist	rict i	rating 65		_		(0)					_
Levee Districts		22	50	21	110	59	00	01		63 ACRAME			66 STREAM	67 MS	68	69	70	71	72	73	74
1 - Glenn County 1 - Sutter County 2 - Glenn County 5 - Glenn County 7 - Sutter County	12.4 16.7 4.9 12.2 6.2	G G F F	G G P G	G G P G	G G F G	G G P G	G G F G	G G P G	- - - - - - - - - - - - -	G G G	G G G	G G G	G G G	- G G G	- G G G G	G G G G	G G G G	G F G G	G G G	G G G F G	G G G F G
Reclamation Districts																					9
3 - Grand Island 10 - Simmerly 70 - Meridian	28.6 21.9 23.6	P G G	P G G	P G G	F G G	F G G	G G G	G G G	G G G	F G G	F G G	F G G	F G G	F G G	F G G	F G G	G G	G G	G G	G G	G G
108 - River Farms 150 - Meritt Island 307 - Lisbon	20.6 18.1 6.7	G P P	F P P	G P P	G P F	G P P	G F F	G F F	G F P	G F P	G F P	G F P	G F P	G F P	G F F	G F F	G F F	G G P	G G P	G G F	G G F
341 - Sherman 349 - Sutter 369 - Libby-McNeill	9.7 12.6	P P P	P P P	P P P	P P P	P P P	G F P	G F P	G P P	G P F	F F P	F P P	G F P	F P P	F P P	G P F	G P F	G P F	G F F	G F G	G F G
101 - Byer Island 156 - Egbert 537 - Lovdal	20.5 10.7 6.1	G P F	G G G	G G G	F G G	G F G	G G F	G G G	G G G	G F G	G F F	G F <u>1</u> /	G G G	G G	G G G	G G	G G G	G G	G G	G G	G G
104 - Pearson 104 - Walnut Grove 550 - Upper Andrus	6.8 1.2 11.2	P P P	P P F	F G P	P F P	P G P	F F F	F P F	F P F	P P F	F P F	F P F	F P F	G P F	G F F	G P F	G F F	G F F	G G F	G G F	G G F
Nn3 - Tyler Island 755 - Randall 755 - Glide	12.4 1.9 1.7	P P P	G P P	F P F	F P P	F F P	F F	F P F	F P P	G P P	F F G	F F	F F	FF	F G F	F G F	F G F	F G F	F G F	F G F	G G F
77 - Live Ook 184 - Flumas Lake 785 - Oriver	4.1 32.5 5.7	P G F	G G F	G G	F G F	G G F	G G F	G G F	G G F	G G G	G G F	G G F	G G F	G G F	G G F	G G F	G G F	G G	G G	G G	G G G
787 - Feir [17 - Carlin 8 7 - Elkhorn	4.4 7.7 4.2	G F P	G P P	G P P	G G P	G F P	G F P	G F	G G F	G G P	G G P	G G P	G F	G F	G G F	G G F	G	G G	G G	G G	GGG
9 ) - West Sauramento 9 1 - Netherlands 100 - Natomas	13.7 32.3 42.6	P F	P F G	G G G	F F G	F F G	F F G	F G	F F G	F G G	G F G	G F G	G F G	G F G	G F G	G F G	G F	G G	G G	G G G	9 000
1001 - Nicolaus 1 00 - Sutter Basin 1600 - Mull	44.1 54.4 14.7	F G G	G G G	G G G	G G F	G G F	G G F	G G F	G G F	G 0 R	G O F	G O F	G O F	G O G	G O G	G O G	G O G	G O G	G O G	G O G	9 999
1501 - Twitchell 1560 - Tisdale 2035 - Conaway	12.1	G G	G G G	G G	G G	G G <b>G</b>	F G	G G	G G	G G	F G	F	F G O	F G	F G	F	F	FG	GGO	GGO	999
100 - Hastings 108 - Yolano 2098 - Na The-Haas Area	16.0 8.7 12.1	F P	G F P	G G P	G G	G G P	G G P	G G P	G G F	F G F	G G	G G	G G	F G	G G	G G	G G	G G	G O	G	G
.103 - Wheatland	9.8	P	P	P	P	P	P	P	. P	P	P	1/ F	P	P	F	F	F	G	G G	G G	GGG
Named Districts	7.4	P	P	P	P	P	P	F	F	1/	P	F	F	G	G	F	F	F	F	F	G
American River FCD Brannan-Andrus LMD Butte County Chico, Mud &	.4.1 19.5	G -	G ~	G -	G -	G -	G -	G -	G -	G -	G -	G -	G -	G -	G G	G G	G G	G G	G G	G G	G G
Sandy Creeks City of Marysville	24.4	- G	- G	- G	- G	- G	- G	-	-	- 0	-	G O	G	G	0	0	0	0	0	0	0
City of Sacramento Eastern Honout Creek Area	3.6	G	G	G	G	G	G	G G	G F	G	O G	G	G G	G	G	O G	O G	O G	G	O G	G :
(unorganized)	1.5	F	F	F	. P	P	P	P	P	P	P	P	P	P	F	F	F	F	F	F	G
Knights Landing Ridge Orainage District Sacramento River West	12.5	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	P	F	G
	50.2	F ·	F	G	G	G	F	F	F	F	F	G	F	G	G	G	G	G G	F	F	G F
Solano County, Yolo Bypass Tehama County, Deer Creek Tehama County, Elder Creek	6.9 8.1	F	F	F	P	P	P	F	G G	F	F	F	F	G G	F	F	1 G G	G G	G G	G F	G
River (Rock Sites)	4.5	-	-	-	-	-	_	_	_	_	F	G	G	G	G	G	G	G	G	F	G
Y lo County Cache Creek State of California	0.3	-	-	-	-	-	~	G	G	P	F	G	G	G	G	G	G	G	F	F	G
Sucramento River East																					
Levee Colusa County East and West Levee	26.8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Wadsworth Canal East Levee Sutter Bypass West Levee Feather River	9.4	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	O G	0	0	0:
Hamilton Bend Cache Creek & Settling	3.4	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Basin	26.3	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	0		0	0

Symbols express the following maintenance ratings: 0 - Outstanding F - Fair G - God P - Foor  $\underline{1}$ /Not inspected; reconstruction

Table 3. TWENTY-YEAR LEVEE MAINTENANCE RECORD, 1955-1974 (continued)

Tuble																-					
								/16×14	Main ti-unit				by ye		1+e1						
Mainteining Agency	Miles	4.0	56	:7	58	59	60	61	1 :: 1	63	64	65	5.5	67	65	n9	70	71	7:	13	74
State of California (Cont'd	)	1						SAC	CRAMENT	O VAI	LEY S	TREAMS	(Cont	inued							_
North end South Levee Sacramento Bypass West Levee Yolo Bypass East Levee Yolo Bypass North and South Levee	3.6 9.3 2.0	G G	G G	G G	G G	G G G	G G	G G	G G	G G	G G	G G G	G G	G G G	G G	G G	G G	G G	G G	G G O	G 0 0
Willow Slough Bypass North and South Levee Putah North and South Levee	12.5	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G	G G
Tisdale Bypass	9.0	G	G	G	9	G	G	G	G	G	G	G	G	G	G	G	G	G	S	G	S
Maintenance Areas  1 (RD 2047)	177 1	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	g	G	G	3
3 (RD 803-823) 4 (RD 811 & Wash. LD) 5 (Butte Creek)	17.1 5.2 3.4 31.9	G G G	G G	G G	G G	GGG	G G	G G	G G G	G G	G G G	G G	G G	G G G	G G	G G G	G G	G G G	G G G	G G G	G G G
6 (RD 73 & Knights Landing Area) 7 (Drainage District 1	6.0	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
& Unorganized)	12.1	-	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
9 (East Levee Sacramento River ScSacramento) 10 (North Levee American	19.6	-	F	G	G	F	G	F	F	F	F	F	G	G	G	G	G	S	G	G	G
River; (RD 2077 & Unorganized (Colusa Basin Drain)	4.3 1) 4.0 11.3	-	-	-	G G G	G G G	G G G	G G G	G G G	G G G	G G G	G G G	G G G	G G	G G G	G G	G G	G G	G G	G G	G G
13 (Cherokee Canal Butte County)	42.0	-	-	-	-	-	-	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Reclamation Districts	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$																				
1 - Union Island	Ion Island     1.1     -     -     F     G															G	G	G	G	G	G
17 - Mossdale 404 - Boggs 524 - Mid Roberts Island	4.1			-	P	P	P	P		G	G F F	G F F	F	F	F		G F F	GFF	G F P	G F F	GFF
544 - Upper Roberts Island 1632 - Del Puerto 2031 - Elliott 2058 - Pescadero	10.3 6.3 13.2 6.7	-	-	-	P - - P	P - - P	P - - -	P - - - -	<u>1</u> /	F - G	F - G	F - - -	F - 1/ G	F G G	F - F G	F G G	P G G	F G G	P 1/ G	P G G	P G G
2062 - Island	12.2		_	_	P	F	G	G	G	G	G	G	G	G	G	G	G	G	g	G	
2062 - Island 2063 - Crows Landing 2064 - River Junction 2075 - McMullin	10.6	-	-	-	F P	- G P	G G	G G G	FFG	G F G	G G	G G	G 1/ 1/	G 1/ 1/	G G	F	G P G	G P G	F F G	FG	O FF FC
1085 - Keseon 1189 - Stark	6.2	-	_	-	~	- P	- P	- F	1/ P	F	- P	- P	- F	<u>1</u> /	G F	F	G G	G G	G G	G G	G G
191 - Chase 192 - Dos Rios	3.5	-		-	-	_	=	G G	F	P	F	F	F	P F	F	F	F	F	F	G	G G
3:34 - Walthall 3:35 - Faraile Junction	4:3	-	-	-	- P	_ P	- P	_ P	- P	F	G P	G P	G P	G P	G P	F	G P	G F	G G	G G	G G
1996 - Weatherbee Lake 1999 - El ° ya Fanch	0.L 3.4	-	-	-	-	-	-	-	-	-	3	3	G 1/	G F	G	G	3	P G	F G	F	G G
21 - White Lake Ranch 2101 - Blewett 2102 - Lara Ranch	3.5	-	-	-	-	-	-	-	-	-	-	-	1/ 1/ 1/	G G F	3 3 6	G G	3 3	G G G	G G G	G G G	G G
2107	4.3	-	-	-	P	P	P	P	F	P	P	P	P	P	F	P	F	P	P	P	P
Named Districts																					
Fresno County Streem Group (Fresno Irrigation Dist., Lower Sen Joaquir Levee	9.3	G	G	G	F	G	G	G	G	F	F	F	G	G	G	Ğ	G	G	3	G	G
	191.5	-	-	-	-	-	-	G	G	G	G	G	G	G	G	G	G	G	G	G	3 :
Merced County Stream Group (Merced Irrigetion Dist. San Josquin County Flood	6.3	-	-	-	P	F	G	G	G	£	F	G	G	G	G	3	G	G	G	G	G
Control Dist. Bear Creek	46.	-	-	-	-	-	-	-	-		1/	' G	G	G	G	3	G	S	3	G	G
San Joaquin County Flood Centrol Dist Littlejohns & Duck Creek Diversing Sen Joaquin 'unty Flood Control List Morm	6.4	G.	G	G	G	G	G	G	G	G	G	G	g	G	G	3	G	3	3	3	G
Slough.	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	G	3	3
										MISC	ELLANE	ous 31	REAMS								
Leke Tight 1 Control District White Treek Flacer County-Trackee River Kings River Flo d Control	14.3	-	-	-	-	-	G	G	G	G	F	G	G	G	9	3	G	3	5	3 G	3
Flacer County-Truckee River Kings River Flo d Contr 1 Distri t-Kings River	115.3	-	-	-	-	-	S -	G -	G -	G -	G -	G -	G -	3	-	-	-	-	-	F	G G

Symbols expr-so the following maintenance ratings:  $\delta$  - Gutstanding F - Fair g - G - Good g - From g

#### Table 4. PROJECT LEVEE MAINTENANCE ON SACRAMENTO VALLEY STREAMS IN 1974

Table 4. PROJECT LEVEE MAINTENANCE ON SACRAMENTO VALLEY STREATED TO Compliance with federal regulations governing maintenance of flood protection works 9.																						
					e e		Compli	_	7	eral re	7				nonce	of flo	od pro	ection	works	Ove	ngs	1
District	per	Streom		Bonk	of leve miles	/	./	Sency /	90,00	le de la	Contro wild g	rowth	Report of	Cocks	Condition	inen!	8 8	Posturing	. /		ace	Remarks
or orea	numbe	Streom	1	ă	th of	/		, de 1	8 000	E /0	° / 1	· / .	8 /8	0 0	10 10	10 %	3/2	\$ 6		ress	teno	
	Unit		RI	Li	Length	SILI	3/33	100	40000 B 8000 B 8	L'includ	(A)	Roden	Pod on	800	100		Confrol of	Condition	/\	Progr	Mointen	
Levee Districts			H			7000	Reodiness		/ * * * * *	140	/ ~				(			0 4				
No. 1 Glerr Count		Sacramento	l <sub>x</sub>	Ш	12.4	G	G	G	G	G	G	G	G	3	G	ا ز	G	G		3	G	
Mo. 1 Sutter Jour	ntv	Feather	X	Н	16.7	G	0	G	G	G	G	F	F	3	G	0	G	G		G	G	Maintenance has
No. 2 Glenn Count	_	Cacramento	Х	H	4.9	G	F	G	G	G	g	G	G	G	G	Э	G	G		ü	G	improved.
No. 3 Glert Count		Cacramento	┢	X.	12,2	F	F	3	F	F	F	G	G	3	G	3	G	G		F	F	Maintenance needs
No. 9 Glenn Count		Feather	X	H	5.2	G	G	G	G	G	G	G	G	0	G	G	G	G		G	G	improvement.
Re-lamation Distr	rict		╁	Н								-								_		
no. 3	1	Steamboat																				
		Slough		Х	11.0	G	G	-0	G	F	G	3	G	F	G	G	G	G		G	G	
	2	Sacramento	Х	Ц	17.6	G	G	Ů.	G	F	G	G	G	F	G	G	G	G		F	G	
No. 10	1	Simmerly Slough	l <sub>x</sub>		7.7	G	G	3	G	G	G	G	G	G	۱.	G	G	G		G	G	
	0	Feather		х	11.0	G	G	ß	G	G	G	G.	G	- G :	G	G.	G	F		G	G	
	٦	Honcut Creek		Х	3.0	6	G	0	G	- 6	G	G		G	G	G	G	G		G	G	
No. 70	1	Sutter Bypass	1		6.0	G	- 0	3	15	G	h	G	- 0	G	G	G	G	G		G	G	Maintenance is
	ž	Sacramento	Γ	x	15.6	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	very good.
No. 108		Colusa Drai:	H	Х	70.0	G	G	b	G	G	G	F	G	G	-	G	G	G		G	3	Come subsidence
			ı																			appearing in this levee,
No. 15J	1	Sutter Slough	$\vdash$	х	1.5	G	F	G	G	F	F	G	G	G	F	G	G	G		F	G	
		Sacramento	x		8.0	G	F	G	G	F	F	G	G	G	F	G	G	G		F	ď	
	3	Elk Slough	1	х	9.6	G	F	G	G	F	G	G	G	G	_	F	F	G		F	F	This levee receives
																						only backwater against it.
No. 307		Sacramento	1.4	Н	7	G	F	G	G	F	F	F	G	G	F	G	3	G		F	F	
No. 341	1	Threemile	t	Τ																		
		flough	X		3.3	G	- G	G	0	G	G	G	G	G	G	G	G	G		G	G	
	0	Sacramento		Х	6.4	G	G	G	G	G	G	G	G	G	- 0	G	G	G		G	G	A portion of this levee is unstable.
No. 349	1	Sacramento	Y		.1.6	F	F	G	G	F	G	G	G	F	F	G	G	G		G	F	Maintenance in this
	2	Steamboat																				district is showing continued improvement
		Slough	Ľ		4.4	F	F	G	F	F.	F	G	G	F	F	G	G	G		G	F	
	3	Sutter Slough	-	. Х	6.6	F	F	G	F	F	F	G	G	F	F	G	G	G		G	F	
No. 369		Sacramento	╀	Х	0.8	G	F	G	G	G	G	G	G	F	F	G	3	G	_	G	G	
No. 501	1	Steamboat Slough	Х		6.8	G	G	G	0	G	G	G	G	G	G	G	3	G		G	G	
	5	Carhe Slough		Х	3.6	G	1)	G	G	G	G	G	G	G	G	G	G	G		G	G	
	3	Miner Slough		Х	7.8	G	G	G	0	G	G	G	G	G	F	G	G	G		G	3	
	14	Sutter Slough	У		2.3	G	g	G	3	G	G	G	G	G	G	G	G	G		G	G	
No. 536	1	Lindsey				2	_	2	_	_	0				-	0		0		_		lane subsider se
		Slough	X		e.7	G	G	G	G	G	G	G	G	G	F	G	G	G		G	G	Some subsidence appearing in this
	2	Yolo Bypass	j.		5.0	G	G	G	G	G	G	G	G	G	-	G	G	Ġ		G	G	levee.
No. 537	1	Sacramento	X		4.8	G	G	G	G	G	G	G	G	G	F	G	G	G		G	3	
	2	Yolo Bypass		Х	1.3	G	G	G	G	G	G	G	G	G	G	F	G	G		3	F	
No. 551		Sacramento		Χ	6.8	G	G	G	G	F	F	G	G	G	F	G	G	G		G	G	
No. 554		Sacramento		Х	1.8	G	G	G	G	F	G	G	G	G	F	G	-	G		F	G	
No. 556	1	Georgiana			-		-	_	_	-			-	P	_		G	G		G	F	Maintenance in this district has
	_	Slough Sacramento	X	l,	5.6	G	F	G	G	F	G G	G	F	P	G G	G G	G	G		G	F	improved.
No. 563	-	Georgiana	+	Х	110	-0	- F	· ·	0	2	· ·	· ·	F	P	0	0	0	· ·		0	F	Maintenance in this
10. 503		Slough		Х	12.4	G	G	G	G	G	G	F	G	P	G	G	G	G.		G	G	district has greatly improved.
																						resht over

Table 4. PROJECT LEVEE MAINTENANCE ON SACRAMENTO VALLEY STREAMS IN 1974 (cont)

Table 4.	۲	ROJECI L	.E	V E	E	MAH	NIE	NAN	ICE	ON	SA	CRA	MEN	1TO	VA	LLE	Υ :	STR	EAN	AS I	N I	974 (cont)
					9		Compli	once w	ith fed	erol re			/	mainte	nance	of flo	od prol	ection	works	Over	roll ings	
District	per	Stream	-	ROOM	of leve miles	/	'. /	Jene /	9,000	à L	Contro		Control	TOCKS	0,000	- E	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	starial.			e C	
or oreo	number	Stream	'	ă	th of	1/2	E 2	ole le	0 00	inmen,	0 / 1	ě/.	8/0	8/6	10 0 10 I	revermen)		C. Pos	· /	1655	enon	Remarks
10	Unit		Rt	Lf	Length	District mountain		Adequore Cong	40e Quole	Olers Inclus	100k) 100	Roden	epo"	Repair of Nos	Condision	Congition	Control	Condition	·/	Progr	Mointeno	
Reclamation Dist	rict	.5	t				7	1	1	/= -	7~		( ) ~	(		1		7 0 4	-			
No. 7=5		Carramento		χ.	1.9	;	9	G	G	7			;	G	13	G	3	G		;	G	
No. 761		Sarraments	X		1.7	;		3	3	:	i i	;	3	3	ŀ	G	3	3		G	P	Mairte ar e is
No. 777	-	Feather	+	H	4.1	,	G	G	G	G	3	G	3	3	,	G	G	3	_	;	G	improving.
No. 784	1	Yuba	1		-	G	G	G	G	G	G	G	G	G	G	9	G	7		3	G	
NO. 104	_	Featler		,	13.6	1	6	G	6	G	,	3	G	i	G	7	3	G.		5	G	
	2	Bear	1	^	4.7	G	G	G	G	9	6	G	6	G	G G	,	,	G		3	G	
	4	Interceptor	"						~				.,			, í		Ĭ				
		Canal	Х		5.3	G	G	G	G	G	.5	G	3	3	G	G	G	7		G	G	
	5	Interceptor Canal		х	4.3	3	G	0	G	G	-6	3	9	G	G	9	G	7		3		
	6	South Dry												1								
4		Creek	X		1,9	6	G	G	G	G	G	G	G	0	G	7	G	G		G	G	
**	7	Yuba	-	Х	3.7	0	G	G	G	G	G	- 0	G	G	0	0	G	G		0	3	Formerly M.A. #
No. 78°	1	Sarramento Yolo Bypass	X	,	3.3	F	F	G G	7 6	F	F	G F	3	G G	F G	9	G G	G G		F G	G	
No. 787		Colusa Drain	₽	X	4.4	F 3	G	0	G	$\vdash$	G G	F 3		G	- G					G	0	muda la la constitución de la co
10. 07		coinss Drain		î.	4.4	,		17	, u	G		-	3	()	-	G	G	0		G	G	This levee is unstable.
No. 817	1	South Dry Creek	Г	V	3.8	G	G	G	G	G	G	G	G	G	G	G	0	G		G	G	
	-	Bear	· ,	^	3.9	G	G	G	3	G	G	G	a	G	F	G	G	G		G	3	
No. 827	1	Sacramento	X	Н	1.4	G	F	G	G	F	G	G	G	3	3	F	G	G		G	G	
	2	Yolo Bypass		χ	2.8	G	F		G	3	3	F	F	G	3	G	G	G		,	,	
No. 200	1	Sarramento	X	Н	9.0	3	G	G	3	G	3 .	G	3	G	G	G	G	3		G	3	
	c'	Yolo Bypass		х	.7	i)	G	G	g ·	G	g l	G	G	G	G	G	G	G		G	3	
No. 999	1	Yolo Bypass		Х	15.4	F	G	G	F	G	G	F	ŀ	G	-	F	G	G		F	I	Levee does not
												١.			١.							re-eive fl-odwater
		Miner Slough Sutter Slough	l.×		2.3	4	G	G	F	F	G	G G	G	F	8	3	3 1	3		G	1 0	
	- S	Sarramento	l x		3.7	F	G	G	a	G.	G	G	G	- 3 G	G	G 3	G	G G		G	3	Leves reserves only
		Sa Fametico	^		2.00	r				. "		"	0		0	,		0			1	Levee rereives only lackwater against it.
	Γ,	Elk Slough	l v		9.7	F	a	6	T	F	p.	G	3	G		F	17	F		12	F	Maintenance improved juring 1973.
No. 1000	1	Sacramento	H	x	18.6		0	G	F	G	G	G	G	F	G	3	G	G		G	G	
	2	American	l <sub>x</sub>		2.3	0	0	G	G	G	G	G	G	G	_	G	G	G		,	3	
	3	Matomas																				
		East Canal	X		17.3	2	2	G	1	G	3	G	3	G	~	3	3	G		G	3	
	- 23	Natomas Cross Canal		v.	4.4	0	-0	G	G	0	o.	0		G	-	G	G :	G		3	0	
No. 1001	1	Yankee Slough	X		4.0	-6	-1	G	G .	G	G	G	G	3	G	d	G	G		G	G	
	2	Yankee Slough		<	3.7	G	1	G	G	G	G	G	G	- 6	G	G	G	G		G	-6	
	3	Bear		١.	12.5	G	e	G	G	G	G	G		3	F	G	G	G		7		
	4	Feather		4	13.4	G	4	G	G.	G	)	G	G	G	G	3	3	G		G	;	
	£	Natomas Cross Canal	X		5.4	G	c	G	G	G	G	ď	G	13	l e	g	G	;		G		
	6	Coon Creek																				
		Interceptor	X		4.5	G	J	G	- ()	2		- C	/ *	;	-	- 0	0	j		3	-	
No. 1900	1	Sacramento		Α	33.6		G	G	G	G	1)	Ų.		G	;	-	;	3		;	-	
No. 1600	2	Jutter Bypass	X	H	30.6	-	-0	G	0	0	-	1		-	G		G			G	-	
No. 1600	1	Jarramento	X		10.0	G	G ,	G	G	G	G	G	G	9	G	7	;	G		3	6	
No. 1501	2	Yolo Bypass	-	Ĥ	4	G	3	G	G	G	G	G	G	- G	G	F		G		- G	- 0	This even is
10. 1001		Threemile Slough		١,	0.7	G	3	F	3	G	9	G	F	F	G	3	G	G		;	7	tin ever in tin ally - doi:iding.
			1																			

Table 4. PROJECT LEVEE MAINTENANCE ON SACRAMENTO VALLEY STREAMS IN 1974 (cont)

Data	Table 4.		ROJECT L	_ \							ON			MEN			LLE						974 (cont)
Manual No.   Man						9 9		Compli	ance w	th fed	leral re			erning					tection	works	Ove rai	rall ings	
Manual No.   Man	10		Stream	H	Н	Length of leve in miles	District Mointer	Readiness	Adequore for	Adequal 8 600	Molecular Molecular	wild g	rowth	Report of	Report of	Condition	Condition	Control of Poli	Condition Piper		Progress	Maintenance	Remarks
March   Marc	Re-lumation Dist	rict	S	T														•					
Marie   Mari	No. 1550	1	Sacramento		Х	3.0	G	G	G	G	G	G	G	G	G	G	G	G	G		G	- 13	
				X	Ц	9.1	0	0	G	G	n	G	G	G	G	3	G	G	G		G	G	
The state of the s	· ,gr	1	Settling	х	i	2.0	0	0	G	0	0	3	G	0	0	-	0	G	G		0	0	
The North No. 18   Stringer   X   Stringer		-	Yolo Bypass	X		7.h	0	٥	G	100	-	-0	G	0		-	)	G	G		100	- 0	
Class Treek   C   Value			Bypass		Х	2.5	)	0	G	100	_	o.	G	0	1,0	-		3	G				
1   Yolf Bypens   X   Young	%o. [60	1	Lindsey Slough		х	7.2	G	G	G	G	G	;	G	;	F	3	G	G	G		G	- a	
1   1016 Eyean   X   74   2   10   0   7   0   7   5   3   1   0   0   0   1   5   2   2   2   2   2   2   2   3   2   2		,	Ulatis Creek	<		3.7	G	G.	G	- 3	G	G.	7	G	G	-	17	G	G		G	- 6	
1		3	Carne Clough	Х	Ш	'.1	G	7)	G	- 7	G	-0	G	7	P	3	G	ď	G		;	l)	
The Court of the Front Condewn.  The Condewn.  Th	No. 0 <sup>20</sup>	1	Yold Pypass	Σ		7, 5		-00	i				;	1	-	-	G	G	G		;	h	
The ne flough		5			Х			71		-	G	3	F	3	i.	-	F	-G	G		G	13	'n gravel or rown roadway.
Second District   Second Sec	14. 2014A∷	1	Yolo Bypass	Y		4.4	G	G	P	6	G	G	G	3	F	- 6	G	ij	G		G	1;	our tirually
3   Mass Slough   X   1.   0   0   F   0   0   0   5   0   0   1   0   0   1   0   0   1   0   0		đ	a he Slough		X.	2.9	G	G	P	17	0	- 6	G	G	F	-6	G	G	G		G		c tinually
## Be k Levee		3	Haas Slough		×	1.9	G	G	F	G	G	d	G	;	G	G	G	;	G		:	:	atsidence appearing :
Creek		Ц	Ba k Levee		х		1	C	G	G	G G	G	G	3	С	;	G	ď	;		C	,	Dutsiderce
1	No103	1	Creek		х					i	ı						1		ì			;	
Second Districts	110 22.00	,		H				-	-		-	-		-	├─	G	-	-	-		-	1	
American River   1   Areade Creek   X   2.1   G   G   G   G   G   G   G   G   G	10, 104	, i		х	Î			1		1	١.			i .		-						-	
Flood Octrol     Hetomas Eest																							
Part	American River Flood Control	1			Х	1	G	G	G	G	G	j	G	-0	;	17	3	;	- 13		G	- 0	
## American	Distri †	0			х	4.0	i	G	G	C	C	G	G	F	G	-G	G	;	G		G	10	
Seremento		5	Ameri ar	Х		3.4	;	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
6 Linda Creek		Ž4	American	Н	Х	11.0	G	G	G	F	G	G	F	G	F	ď	G.	-3	G		G	;	
Therefore Area Creek X		-	Sacramento	П	Х	0.4	G	G	G	G	G	G	G		G	G	G	;	G		G	- 0	
Refine Address   Stock   Sto		-6		П	Х	1.3		Ü								1	0	G	G ·		l		
Brainen-Andrus   1   Georgiana		^		X							1							;					
Levee Mainterance		_		Н	Н	1.5	G	G	-	G .	G	-	G	G	G	G	F	3	)		- 5	- 0	
Putte County   1 Mud Creek	Levee Mainterance	e	Georgiana Slough	Х		6.0	7	G	G	F	G	G	G	G	G	S	3	G	3		G	G	stantially rebuilt
. Mud Creek		1.	Sacramento		Х	13.3	G	G	G	G	F	F	G	3	F	3	- 6	;	7		1		the June 1972 flood
2 Syeamore and Cheep Hollow Creeks X X 4.2 = 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Butte County	1	Mud Creek	Х		7.3	n	0	G	G	0	n	G	-	- 1	- 1	o	G	G		2	1	
Cheep Hollow   X X   A.2   0   0   0   0   0   0   0   0   0			Mud Creek		Х	8	ī.	0	G	G	ų		0		Q	G	-	G	3				
Dry Creeks   X X   2.d   0   G   0   0   0   0   0   0   0   0		3,1	Theep Holl w	X	Х	4.1		-13	G	ō	n		-			2	e.	G	-3			-	
Diversion X 1.9 0 0 G G G 0 0 0 0 0 G G G G 6 6 6 6 6 6		4	Cyramore and Dry Creeks	¥	х	2.9	2	ō	G	U	o.		,				13	;	G		-	-	
6 Serramento X G G G F F G ; F m k site.			Big Chi o Diversion		Х	1.8	U	0	G	G	G		()		e		0	G	G		100		
7 Sarramento   X   G   G   G     F   F   G   -   -   F   F   - k site.		6	Sarramento		Х		G	-	-	G	G	-	-	-	F	F	G	-			;	F	m k site.
		7	Sarramento		Х		G	-		G	G	-	-	-	F	F	G	-	-		;	F	k site.

Table 4. PROJECT LEVEE MAINTENANCE ON SACRAMENTO VALLEY STREAMS IN 1974 (cont)

												CRA				LLE						974 (cont)
									ith fed	eral re		/			nance	_	1501	ection	works	Ove	ngs	
District or oreo	Unit number	Stream	Rt	Lt	Length of leve In miles	Dietrici Monnie	Realinese (1000)	4 de quoie	Agedon Stree	5 /	Contro	rowth/	Report of a	Report of	Condillon		Control of Pole	Condition		Pragress	Mointenance	Remarks
Named Districts																						
City of Marysville	1	Simmerly Slough		,	3.1			G														
Marysville		Feather		, l	1.3		-	G		5	-				-	G		G				
	3	Yuba		^	5.2		-			,				,			,	,				
2144 06	2	Sacramento	Н	-	3.5	G	g.	G	6	G	G	G	G	G	G	()	G	;		G	3	
City of Cacramento		ouc1 americo	Н	_			_			_		_			-							
Eastern Honcut Creek Area (Unorganized)		Honout Creek		Х	1.5	P	£	G	G	G	G	G	G	G	-	7	G	G		G	G	This area needs to be organized.
Knights Landing Ridge Drainage District	1	Knights Landing Ridge Cut	x		6.4	ù	G	ū	G	G	G	F	*7*	3	-	. 3	G	G		G	G	Mainterance is greatly improved.
	2	Knights Landing Ridge Cut		х	6.1	G	G	3	G	G	G	F	F	G	-	G	G	G		G	3	
Sacramento River West Side Levee District		Sacramento	Y		50.0	G	G	0	G	G	G	F	G	3	F	Ü	0	3		3	7	Mairterance is greatly improved.
Bolano Courty		Yolo Bypass			0.6	F	F	G	Р	G	G	G	G	G	-	G	F	F		F	F	Maintenarte is mproving.
Tenama County Flood Control	1	Deer Creek	1		4.1	F	G	G	G	G	- 0	G	G	F	G	F	F			0	3	
District		Deer Creek	3		1.5	F	G	G	- 0	G	G	G	G	G	G	G	F	G		3	3	
	٩	Deer Creek	П		1.3	F	G	-	-	-	-	-	-	-	P	-	-	-		F	1	or i.el or ly.
	4	Elder Creek	Н	X	4.1	F	9	- 3	- 0	0	G	G	F	F	G	P	- 3	G		F	F	
	Ē,	Elder Creek	X		4.0	F	G	G	G	0	G	G	F	F	G	F	- 6	G	,	P	F	
	6	Sacramento		Х	0.5	G	-	-	G	3	-	-	-	G	S	g .	-	-		G	G	rock site - channel orly.
	7	Sarramento	Х		0.8		-	-	;	G	-	-	-	0	G	G	-	-		- 6	- ;	0
	-6	Sacramento		7	0.6	G	-	-	- 6	G	-	-	-	- 15	9	16	-	-		- 13	- 10	"
	9	Sacramento	П	Х	0.2	G	-	-	1)	ď	-	-	-	- IG	G	13	- !	-		G	7	"
	10	Sacramento	X		0.7	G.	-	-	-6	F	-	-	-	- 6	G	113	-	-		- 13	ij	11
	11	Sacramento		Х	0.5	G	-	-	0	F	-	-	-	G.	G	-6	-	-		F	E	"
	12	Sarramento	П	Х	0.5		-	-	13.4	F	-	-	-	G	G	6	-	-		F	1-	"
	13	Sacramento	Х		0.1	b	-	-	-G	G	-	-	-	G	G	l li	-	-		- 13	13	"
	15	Sacramento	П	Х	0.1	G	-	-	- G	G	-	-	-	G	3	6	-	-		G	- 15	"
	16	Sacramento		Х	0.5	7	-	-	- ;	F	-	-	-	G	G	Э.	-	-		G	7	11
Yolo County		Tache Creek	X		0.3	G	G	G	F	G	G	G	G	3	-	7	3	3		- 7	13	
Maintained by State of Californ	.fa		П																			
Sacramento	1 1 1	Sacramento		x	20.4	G	0	,	F	P	G	G	G	G	G	0	G	3		0	G	
River East Levee	2	Colusa Bypass	X		2.3	0	0	G	0	0	0	G	0	G	G	0	G	1			1	
	3	Colusa Bypass		х	2.3		ō	3	2	3	3	G	0	G	0	0	G	,		0		
	4	Moulton																				
		Bypass	Х		0.3	0	0	- 6	L1	-11	0	G	0	G	n	0	- 6	- 0		b	- 11	
		Bypass	Ш	Х	1.6	0	0	3	F	U	0	G	0	G	0	0	- 0	G		1	G	
Wadsworth Canal		Wadsworth Canal		х	4.~	0	41	d	G	o	υ	G	0	0	c	3	0	G				
		Wadsworth Canal	X		4.7	3	9	G	G	D.	0	G	0	C	0	G	G	G				
Sutter Bypass		Sutter Bypas		Х	22.4	Ĵ.	n	G	n	0	0	0	0	0	G	G	3	G			1	
Feather River Hamilton Bend		Feather	X		3.4	e	2	0	- 0	G	G	g.	0	G	G	G	G	G		G	G	

Table 4. PROJECT LEVEE MAINTENANCE ON SACRAMENTO VALLEY STREAMS IN 1974 (cont)

			_	-			Compt	0000	uth for	lerel re	nulatio	00.00	ernine	mointe	nance	of the	od pro	tection	mor ke	Oye	roll	
					10		/ ampli	/		/	Contro	1 00 /		155	5	7	52	/ 8	WOF KS	Ove	ings	
District or ored	Unit number	Streom	Ri	LI	Length of lev in miles	District Mointer	Recalment	Adequote for	Adequole grode	Mount in mont	allq d	rooth	ያ / ≿	Repair of	Condition	Condition	Control of Po	Condition of		Progress	Mointenance	Remarks
Maintained by State of Californ	10																					
Cache Creek	1	Cache Creek		х	11.8	0	0	G	G	0	ō	G	G	ō	0	G	G	G		G	G	
	2	Cache Creek	х		6.9	0	0	G	G	0	0	G	G	0	G	G	G	G		G	G	
	3	Settling Basin	х		1.8	0	0	G	0	0	0	0	0	0	G	0	G	G		0	0	
	4	Settling Basin		х	2.6	0	0	G	G.	0	0	0	0	0	G	0	G	G		0	0	
	5	Settling Basin Exten- sion Levee	х		3.2	0	0	G	G	0	0	0	0	0	G	G	G	G		0	0	
Sacramento Bypass	1	Sacramento Bypass	х		1.8	0	0	G	G	0	0	G	G	0	G	G	G	G		G	G	
	2	Sacramento Bypasa		х	1.8	0	0	G	G	0	0	0	0	G	G	G	G	G		G	G	
West Levee Yolo Bypass	1	Yolo Bypass	Х		2.7	0	0	G	0	0	0	G	G	G	G	G	G	G		G	G	
TOTO DJPAGO	5	Yolo Bypass	Х		1.5	0	0	G	0	0	0	0	0	G	G :	G	G	G		G	0	
	3	Yolo Bypass	Х		1.5	0	0	G	0	0	0	0	0	0	G	G	G	G		G	0	
	4	Yolo Bypass	Х	⊢	.3.6	0	0	G	0	0	0	0	0	0	G <sub>.</sub>	G	G	G		G	0	
East Levee Yolo Bypass		Yolo Bypass		Х	2.0	0	0	G	0	0	0	G	G	0	-	0	G	G		0	0	
Willow Slough Bypass	1	Willow Slough Bypass		Х	5.1	0	0	G	G	0	0	G	G	G	G	G	G	G		G	G	
	5	Willow Slough Bypass	х		7.4	0	0	G	G	0	0	G	G	G	G	G	G	G		G	G	
Putah Creek	1	Putah Creek		Χ	9.0	0	0	G	G	0	0	G	G	G	G	G	G	G		G	G	
	2	Putah Creek	Х		7.3	0	0	G	G	0	0	G	G	G	G	G	G	G		G	G	
Tisdale Bypass	1	Tisdale Bypass		x	4.5	0	0	G	G	G	G	G	0	0	G	G	G	G		G	G	
	5	Tiedale Bypess	х		4.5	0	0	G	0	G	G	G	0	0	G	G	G	G		G	G	
Maintenance Areas	3																					
No. 1 No. 3 No. 4		Sacramento Feather Sacramento	X X X		17.1 5.2 3.4	G G G	000	G G	F G G	FG	G F G	000	000	GOG	G G G	0 0	G F G	G G		G G	G G G	
No. 5	2 3	Butte Creek Butte Creek Little Chico	х	Х	15.4 16.5	G G	0 0	G G	F	G G	G G	0 0	0	G G	G G	G G	G G	G G		G G	G G	
	_	Creek Diver- sion			1.5	G	0	-	G	G	-	-	-	G	G	F	-			G	G	Channel only.
No. 6 No. 7 No. 9		Sacramento Feather Sacramento	X	Х	6.0 12.1 19.6	G G	000	G G	G F F	G G F	G F G	GGG	G O G	G G	F G F	G G	000	G G		GGG	G G	
No. 10 No. 11 No. 12		American American Colusa Drain	X	χ	4.3 4.0 11.3	G G	0 0	G G	G F G	F G O	G G O	G G	G G O	G G	F G G	0 0	G G	G G		G G	G G	
No. 13	2	Cherokee Canal Cherokee Canal	х.	х	18.9	G G	0	G G	F	G G	G G	G G	0 0	G G	G .G .	G G	F G	G G		G G	G G	

Table 5. PROJECT LEVEE MAINTENANCE ON SAN JOAQUIN VALLEY STREAMS IN 1974

Table	e :	5. PROJEC	Т	L	EVE	E N	AIAIN	ITE	NAN	CE	ON	SAI	V J	QAC	UIN	VΔ	LLE	ΕY	STR	REAL	MS	IN 1974
			Г				Compli	ance e	th feds	erol rs	gulatio	ns gove	rning	mainte	nones	of flo	od prat	ection	works	Over	ngs	
District or ored	Unit number	Streom	Rt	-	Langth of lever	District	Recoines	Adequote Concy	400000 8 8100 0000000	Included in the first of the fi	Contro wild g	Roden,	Report of	Repoli of	Condition	Condition of	Confol of Poles	Condition of		Progress	Maintenance	Remorks
Reclamstion Dist	rict											1					- 1					
No. 1		Old River	Х	Ш	1.0	G	G	G	G	G	G	G	G	3	G	G	G	G		G	G	
No. 17	1	French Camp Slough	.,	Х	1.8	G	G G	G G	G F	F	G G	3 P	G	3	G F	F	G G	G		G G	G G	
	1	San Joaquin	X	Н	2.3	F	F	G	F	F	F	F	F	F	G	G	G	G		F	F	
No. 404	5	French Camp Slough	x		1.8	F	F	a	G G	F	G.	F	F	G	G	F	G	G			F	
No. 524		San Joaquin	П	Х	6.3	F	F	G	F	F	G	F	F	F	F	G	G	G		F	F	
No. 544	1	San Joaquin	П	Χ.	6.1	P	F	G	F	P	F	F	F	F	F	G	G	G		P	P	
	0	Old River	x		4.2	P	F	G	F	P	F	F	F	F	F	F	G	G		P	F	
No. 1602		San Josquin	П	Х	6.3	G	G	G	F	G	G	P	F	G	G	G	G	G		G	G	
No. 2031	1	Stanislaus		Х	7.0	G	G	G	G	G	G	F	G	G	G	G	G	G		G	G	
	2	San Joaquin	Х		6.0	G	G	G	G	F	G	G	G	G	F	G	G	G		G	G	No maintenance along state highway.
No. 2058		Paradise Cut		Х	6.7	G	F	9	G	F	G	G	F	F	G	G	3	G		0	G	
No. 2062	1	San Joaquin		Х	2,6	G	G	G	G	G	G	G	G .	0	G	1	)	G		3	G	
	2	Paradise Cut	Х		4.0	G	G	G	G	G	G	0	G	0	G T	0	G	G		G	G	
	3	Old River		Х	5.6	G	G	G	G	F	G	3	G	G	G	0	0	G		9	G	
No. 2053		San Joaquin	Х		10.5	G	F	G	F	G	G	G	F	F	G	F	P	G		)	F	Maintenance is improving.
No. 2064	1	San Joaquin	X		5.7	F	F	G	G	F	F	G	7	G	F	G	6	G		G	F	
	2	Stanislaus	X		. 6.2	F	F	G	G	P	G	g	G	G	P	G	G	G		G	F	Maintenance in this district has im- proved.
No. 2075		San Joaquin	Х		7.5	С	G	g	G	0	0	0	G	G	G	0	G	G		2	٥	
No. 2085	1	San Joaquin		Х	5.2	G	F	G	G	F	G	G	F	G	G	G	G	G		G	G	
	2	San Joaquin			0.7	G	F	G	G	G	G	G	G	G	G	G	G	G		G	G	Spur levee.
	3	San Joaquin			0.3	G	F	G	G	G	G	G	G	G	G	G	G	G		G	G	Spur levee.
No. 2089	1	Old River	X		1.5	3	F	G	- G	7	G	G	G	F	F	G	G	G		G	G	
	2	Salmon Slough	X	L	1.4	G	F	F	G	G	G	G	G	F	G	G	G	G	_	G	G	
No. 2091	1	San Joaquin	X		7.6	G	F	G	G	G	G	F	G	G	G	G	F	G		G	G	
	5	San Joaquin	╀	-	0.3	F	F	G	G	G	G	F	G	P	-	F	F	-		G	F	Spur levee.
No. 2092	<u> </u>	San Joaquin	X	ļ.,	3.8	F	F	G	G	G	G	G	G	P	P	G	G	F	_	G	(D)	
No. 2094	1	San Joaquin	X		2.8	G G	F	G	G	G	G F	G	G G	G	F	G	G	G		F	F	Spur levee.
No. 2095	1	San Joaquin	+	Y	1.5	G	F	G	G	F	G	G	G	G	-	G	G	G	-	7	3	1
110. 2099	5	San Joaquin		X	3.4	G	F	G	F	F	G	G	G	G	F	F	G	G		G	3	
No. 2096		San Joaquin	Х		0,2	G	F	G	G	G	G	F	G	G	G	13	G	G		G	G	New trustees have initiated a mainte- nance program.
No. 2099	-	San Joaquin	1	X	2.4	F	F	G	· G	F	G	G	G	G	F	G	G	G	-	G	G	
No. 2100	-	San Joaquin	+	X	2.7	G	F	G	G	G	G	G	G	G	-	G	G	3		3	G	
No. 2101	1	San Joaquin	1	Х	3.0	G	F	G	G	G	3	G	G	F	G	G	G	3		G	G	
	2	San Joaquin			0.3	3	F	G	G	G	G	G	G	G	G	G	G	-		9	G	Spur levee.
No. 2102	1	San Joaquin		Х	1.8	G	F	G	G	G	G	G	G	G	F	G	9	G		G	G	
No. 2107	1 2	San Joaquin Paradise Cut	х	Х	2.4	P	P P	G G	F F	F	G P	P G	P G	P G	F -	G F	G	G G		P P	P P	District is now embarking on a maintenance
iemed Districts	-		+	+					-	-			-					-			-	orogram.
Fresno County Stream Group	1	Big Dry Cree Reservoir	k	х	7.4	4 G	G	G	G	G	G	G	G	G	-	G	F	G		3	G	
	2	Big Dry Cree Outlet	k X		0.6	 	G	G	G	G	G	G	G	G	-	G	G	G		0	G	
	3	Little Dry Creek Outlet		X	1.3	G G	G	G	G	G	G	G	G	G	-	G	G	G		G	G	

Table 5. PROJECT LEVEE MAINTENANCE ON SAN JOAQUIN VALLEY STREAMS IN 1974 (cont)

	1	1	1	Т.	·	Comoli	ance w	uth fed	ieral re	oulatio	05 004	arnino	mainte	nanca	of fle						974 (COM)
				9				1 0	7	Cantre		7	15.5				5	7	Ove	ings	
District	number	Stream	Bonk	of .lev	Siries	Readiness	Adequate	9 6 ve	Juen's	wild g	rowth	conitro!	Report of States	Condillon	5 E	S Crown	so la	. /		ng e	Remarks
area				# E	155	OB OB	LO Le	10 00 00 00 00 00 00 00 00 00 00 00 00 0	1.0 July 1.0		, / ;	° / °	8/0	0 0	3/5	\$ 6	\$ 5		5	Mointenanc	1
	ži S		Rt L	Length	District		4 4	40 00 00 00 00 00 00 00 00 00 00 00 00 0	The state of the s	Plands La	Roden	Pepo par	1 8 8		Condillon	Soulia So	Condition C	7	Progr	Moir	
Named Districts	1		11																		
Lower San Joaquin	n 1	San Joaquin	X	22.6	G	G	0	G	G	G	G	G	i i	G	G	F	F		G	G	
Levee District	2	San Joaquin	X	13.8	G	G	G	C	G	G	G	G	G	G	G	G	F		G	G	
	3	San Joaquin	X	2,2	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	žį.	San Joaquin	X	1.6	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	5	East Side	x	-1.0		_															
		Bypass Each Cade	^	34.8	G	G	G	G	G	G	F	F	G	G	G	G	F		G	G	
	6	East Side Bypass	X	36.4	G	G	G	G	G	G	F	F	G	G	G	G	G		G	G	
	7	Bear Creek	X	3.6	G	G	G	G	G	G	G	G	G	G	G	F	G		G	G	
	8	Bear Creek	X	3.6	G	G	G	G	G	G	G	G	G	G	G	F	G		G	G	
	9	Owens Creek	Х	0.9	G	-0	G	G	G	G	G	G	-0	G	13	G	G		G	G	
	10	Owens Creek	Į X	0.8	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	11	Mariposa Bypass	x	3.3	G	G	G	G	G	G	G	G	G	G	G	G	ď		0	G	
	12	Mariposa Bypass	x	3.4	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	13	Ash Slough	Х	1.3	G	G	G	G	- 6	G	G	G	0	G	G	G	G		G	G	
	14	Ash Slough	X	1.3	G	G	G	G	G	G	G	G	G	G	G	F	G ·		G	G	
	15	Berenda Slough	х	5.0	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	16	Berenda Slough	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2.0	G	G	G	G	G	G	G	G	G	G	G	G	G		G	С	
	17	Chowchilla Canal Bypass	х	16,1	G	G	G	G	G	G	F	F	G	G	G	G	G		G	G	
	18	Chowchilla Canal Bypass	x	15.3	G	O	G	G	G	G	G	G	G	G	G	G	G		G	G	
	55	East Side Canal	Х	9.5	F	G	F	G	G	G	G	G	F	G	F	P	G		F	F	
	53	San Joaquin	X	10.2	G	G	G	G	G	G	F	F	G	G	G	G	G		G	G	
	24	San Joaquin	X	8.3	G	G	G	G	G .	G	F	F	G	G	G	G	G	_	G	13	
	25	Salt Slough	Х	2.5	G	G	G	G	G	G	G	G	G	G	G	G	G		G	0	
Merced County Stream Group	1	Black Rascal Diversion	х	1.6	G	G	G	G	G '	G	G	G	G	G	G	G	G		G	13	
	5	Black Rascal Diversion	x	1.9	G	G	G	G	G	G	G	G	G	G	G	F	G		G	G	
	3	Owens Creek Diversion	х	1.4	G	G	G	G	G	G	F	F	G	G	F	F	G		G	G	
	4	Owens Creek Diversion	X	1.4	G	G	G	- 0	G	G	F	F	G	0	G	F	G		G	G	
San Joaquin County Flood Control District	1	Littlejohns Creek	X	2.9	G	G	G	G	G	G	G	g	G	G	G	G	G		G	G	
Control District	5	Littlejohns Creek	х	3.4	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	3	Littlejohns Creek Channels		16.5	G			F	G		P	G	F	G	- G	G	G		G	G	Thannelly.
	4	North Little-	1																		
	5	Channels Duck Creek	+	6.1	G	-	-	F	G	-	G	G	F	G	G	G	G		G	G	hannel only.
		Diversion Channel	Ш	1.0	G	-	-	G	G		0	G	G	-	G	G			0	G	Channel only.
	6	SPRR Drain	X	0.5	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	7	Bear Creek	X	16.8	G	G	G	G	G	G	F	F	G	G	F	G	G		G	G	
	8	Bear Creek	X	16.5	G	G	G	G	G	G	F	F	G	G	C	G	G		G	G	
	9	Paddy Creek	X	1.0	G	G	G	G	G	G	G	G	G	G	G	G	G		G	0	
	10	Paddy Creek	X	1.4	G	G	G	G	G	G	G	G	G	G	G	G	G		3	G	

Table 5. PROJECT LEVEE MAINTENANCE ON SAN JOAQUIN VALLEY STREAMS IN 1974 (cont)

						Compli	once w	ith fed	ero1 re	gulatio	ns gov	erning	mointe	nonce	of f16	ood pro	lection	works	Over	roll	
District or oreo	Unit number	Stream	Rank Rank	Length of levee in miles	District	Redinese	Adequore	40'60'016 0'00'6	2 /	Contro	rowth	Repoir of		Condition	Condition	Control of Poles	Condition Costuma	• /	Progress	Maintenance	Remorks
Named Districts				T																	
County Flood	11	North Paddy Creek	х	3.6	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
Control District	12	North Paddy Creek	х	3.9	G	G	F	G	G	G	G	G	G	G	F	G	G		G	G	
	13	Middle Paddy Creek	Х	1.4	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	14	Middle Paddy Creek	х	1.4	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	15	Mormon Slough	Х	25.6	G	G	G	F	G	G	G	G	F	G	G	G	G		G	G	
	16	Mormon Slough	Х	23.7	G	G	G	F	G	G	F	F	F	G	G	G	G		G	G	
	17	Potter Creek	Х	0,9	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	
	18	Potter Creek	х	0.9	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	

Table 6. PROJECT LEVEE MAINTENANCE ON MISCELLANEOUS STREAMS IN 1974

Table 6. TROOLS						•	141 %	4114	L/4/	*1101		14 14	1130		MINE	.00.	, ,	111/	MIAIS	יוו כ	V 13	114
	Г		Г					ance w	oth fed	lerol re	gulotic	ins gov	erning	mointe	nonce	of fla	ood pro		works	Ove	roll ings	
District or area	Unit number	Streom	Rt		Length of leves in miles	District	Readines.	Adequole	40000 B 0.00c	Moleralde	Contre wild c	rowth	Repoir of	Report of Nache	Condition	Condition	Control of Soles	Condition Posturing		Progress	Maintenance	Remorks
Lake County	1	Middle Creek		Х	7.3	G	F	G	G	F	G	G	G	G	F	G	G	G		G	G	
Plood Control District	5	Middle Creek	Х		3.1	G	F	G	G	G	G	G	G	G	F	G	G	G		G	G	
	3	Scotts Creek		х	1.4	G	F	G	G	Ğ	G	G	G	G	G	G	G	G .		G	G	
	24	Clover Creek & Bypass	Х		1.5	G	F	G	F	G	G	G	G	G	G	G	G	G		G	G	
	5	Clover Creek & Bypass		х	1.0	G	F	G	G	G	G	G	G	G	G	G	G	G		G	G	
Placer County		Truckee			0.6	F	-	-	G	G	-	-	-	-	-	-	-	-		G	G	Channel only.
(ings River	1	Kings River	Х		5.0	G	G	G	F	G	G	G	G	F	G	F	G	G		G	G	
District	5	Kings River		Х	6.0	G	G .	G	F	G	G	F	F	G	G	F	G	G		G	G	
	3	North Fork Kings River	Х		6.0	G	G	G	F	G	G	G	G	G	G	G	G	G		G	G	
	Ц	North Fork Kings River		х	5.4	G	G	G	F	G	G	F	G	G	G	G	G	G		G	G	
	5	Fresno Slough	Х		18,9	G	G	G	F	G	G	F	F	F	G.	G	G	G		G	G	
	6	Fresno Slough		Х	20.4	G	G	G	F	F	G	F	F	G	G	G	G	G		G	G	
	7	Clarks Fork	Х		8.8	G	G	G	F	F	G	G	G	G	G	F	G	F		G	F	
	8	Clarks Fork	Ш	Х	8.3	G	G	G	F	F	G	G	G	G	G	P	G	F		G	F	
	9	Crescent Bypass	Х		5.3	G	G	G	F	G	G	G	G	G	G	G	G	G		G	G	
	10	Crescent Bypass		х	5.2	G	G	G	F	F	O	P	F	G	G	G	G	G		G	G	
	11	Kings River South	Х		13.3	G	G	P	F	F	F	G	G	G	G	P	G	G		G	F	
	12	Kings River South		Х	12.6	G	G	F	G	F	G	G	G	G	G	F	G	G		G	G	

# Table 7. LEVEE CONSTRUCTION, 1974

			110011011,			
Unit No.	Site Mile	Location	Maintaining Agency	Levee Mile	Descripti Recon- struction	Rock
SACRAMENTO RIVER	FLOOD CONTROL	. PROJECTS				
SACRAMENTO RIVER	BANK PROTECTI	ON WORK - by The U. S. Corps	of Engineers			
23	30.1	R.B. Sacramento River	RD No. 3	15.11-15.	51	х
24	77.4 77.6 78.5 73.1 74.7 75.7 100.7 101.7 62.5 62.9 94.8 111.9	L.B. Sacramento River L.B. Sacramento River L.B. Sacramento River R.B. Sacramento River	RD No. 1000 RD No. 1000 RD No. 1000 RD No. 1600 RD No. 1600 SRWSLD SRWSLD M.A. No. 4 RD No. 537 SRWSLD SRWSLD	1.30-1.5 1.10-1.2 0.21-0.3 2.42-2.5 3.98-4.2 5.03-5.2 11.05-11. 12.10-12. 0.00-0.2 4.37-4.5 4.81-5.4 19.87-20.	22 6 2 0 2 12 228 3 2 5	X X X X X X X X X X
25	10.1 9.5 22.7 23.3 23.5 23.7 26.1 26.5 23.5 23.5 24.2 24.3 22.0 22.6 24.6 24.6 23.5 25.1 22.1 23.2 23.4 27.7 28.7 29.7 29.7 29.7 20.7 2	R.B. Georgiana Slough R.B. Georgiana Slough R.B. Sutter Slough R.B. Steamboat Slough L.B. Steamboat Slough L.B. Steamboat Slough L.B. Steamboat Slough R.B. Steamboat Slough L.B. Sutter Slough L.B. Sutter Slough L.B. Sutter Slough R.B. Sacramento River	RD No. 556 RD No. 556 RD No. 501 RD No. 501 RD No. 501 RD No. 501 RD No. 999 RD No. 3 RD No. 3 RD No. 3 RD No. 3 RD No. 349	2.18-2.2 3.00-3.1 1.36-1.4 0.80-0.9 0.59-0.6 0.20-0.3 1.98-2.0 2.31-2.3 2.60-2.6 2.21-2.2 1.76-1.8 4.28-4.3 3.59-3.6 1.56-1.6 0.75-0.7 0.17-0.2 1.26-1.3 1.51-1.7	14 40 55 47 67 77 05 55 79 77 28 80 00	X X X X X X X X X X X X X X X X X X X
26	84.3 85.9 93.1 95.5 119.5 89.0 89.8 93.7 112.6 113.2 113.8 114.7 115.1 122.1 137.3 137.5 142.9 143.1 114.4 118.4 120.1 134.7 142.7 145.0 147.3	R.B. Sacramento River L.B. Sacramento River L.B. Sacramento River L.B. Sacramento River L.B. Sacramento River R.B. Sacramento River L.B. Sacramento River	M.A. No. 6 M.A. No. 6 SRWSLD SRSSLD SRSSLD SRESLD SRESLD	5.64-5.7 4.00-4.1 3.29-3.5 5.73-6.1 27.51-27.4 5.56-5.6 9.57-9.6 20.58-20.1 21.25-21.2 21.25-21.3 30.12-30.4 44.45-44.4 44.75-44.6 49.61-49.6 49.86-49.9 29.22-29.3 33.37-33.4 45.74-5.88 8.30-8.44	4 7 7 7 0 6 1 9 9 4 7 7 7 6 5 3 2 0 3 3 0 2 2 4 5 5 5 5 8 4 4 4 4 4 2 8 8 1 7 7 5 5 3 3 0 5 6 6 8 8 1 7 7 5 5 3 3 0 5 6 6 8 9 1 1 7 7 5 5 3 3 0 5 6 6 8 9 1 1 7 7 5 5 3 3 0 5 6 6 8 9 1 1 7 7 5 5 3 3 0 5 6 6 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	X X X X X X X X X X X X X X X X X X X

# Table 7. LEVEE CONSTRUCTION, 1974 (Continued)

						Descriptio	n of Work
Unit No.	Site Mile		Location	Maintaining Agency	Levee Mile	Recon- struction	Rock Revetment
ACRAMENTO RIVER	CHICO LANDING	RED BL	UFF BANK PROTECTION	PROJECT			
	194.0 196.3		. Sacramento River . Sacramento River	Butte County Butte County			X
	208.4 213.1	L.B L.B	. Sacramento River . Sacramento River	Butte County Butte County			X X
ERGENCY BANK PR	OTECTION WORK						
	124,5	R.B.	Sacramento River	SRWSLD	32.54-32.	64	Х
	143.4 154.8		Sacramento River Sacramento River	SRWSLD M.A. No. 1	50.20-50.2 8.81-8.90		Х
	34.0	R.B.	Feather River	LD No. 9	2.50-2.63	2	Х
ERGENCY LEVEE R	ECONSTRUCTION						
	Site No.						
	1 2 3 4	L.B. L.B.	Colusa Drain Colusa Drain Colusa Drain Colusa Drain	RD No. 787 RD No. 787 RD No. 108 RD No. 108	2.22-2.23 4.17-4.24 1.66-1.78 2.51-2.70	4 X 8 X	
pl. No.			State of California	(D.O.T.)			
5209 5123A	55.8 56.4		Sacramento River Sacramento River	M.A. No. 9 City of Sacto			X X
			l Miles of Rock Reve l Miles of Reconstru				

# Table 8. FLOOD CONTROL PROJECT STRUCTURES, 1974

Structures	Maintaining Agency	Stream	Condition	Remarks
Lindo Channel Diversion Weir	Butte County	Lindo Diversion Channel	Good	
Lindo Channel Control Structure	Butte County	Lindo Channel	Good	
Big Chico Creek Control Structure	Butte County	Big Chico Creek	Good	
Little Chico Control Structure and Weir	DWR	Little Chico Creek	Good	
Moulton Weir	DWR	Moulton Bypass	Good	
Colusa Weir	DWR	Colusa Bypass	Good	
Tisdale Weir	DWR	Tisdale Bypass	Fair	
Fremont Weir	DWR	Yolo Bypass	Fair	
Sacramento Weir	DWR	Sacramento Bypass	Fair	Numerous cracks in concrete portion of structure.
Sutter Pumping Plant No. 1	DWR	Sutter Bypass	Fair	
Sutter Pumping Plant No. 2	DWR	Sutter Bypass	Fair	
Sutter Pumping Plant No. 3	DWR	Sutter Bypass	Fair	Plant being considered for replacement.
Butte Slough Outfall Structure	DWR	Butte Slough	Fair	
Knights Landing Outfall Structure	DWR	Colusa Basin Drainage Canal	Fair	
Nelson Bend Quarry Rock Weir	DWR	Feather River	Good	
Yolo Bypass Cobble Weir	DWR ·	Yolo Bypass	Good	Top of weir raised
Clover Creek Outlet Structure	Lake County FCD	Clover Creek	Good	
Middle Creek Pumping Plant	Lake County FCD	Middle Creek	Fair	The surge box continues to settle.
Highland Canal Diversio Weir & Drainage Structure	n Lake County FCD	Middle Creek	Good	

Table 8. FLOOD CONTROL PROJECT STRUCTURES, 1974(continued)

Structures	Maintaining Agency	Stream	Condition	Remarks
Magpie Creek Pumping Plant	American River FCD	Natomas East Canal	Good	Increased pumping demand expected.
American River Pumping Plant No. 1	Sacramento County	American River	Good	
American River Pumping Plant No. 2	Sacramento County	American River	Good	
Elk Slough Outlet Structure	RD No. 150	Elk Slough	Good	
Mormon Slough Pumping Plant No. 1	San Joaquin County	Mormon Slough	Good	
Mormon Slough Pumping Plant No. 2	San Joaquin County	Mormon Slough	Good	
Mormon Slough Pumping Plant No. 3	San Joaquin County	Mormon Slough	Good	
Duck Creek Diver- sion Structures	San Joaquin County	Duck Creek	Good	Not previously inspected for this report.
Paradise Dam	None	Paradise Cut	Fair	No significant change in elevation.
Wetherbee Lake Pumping Plant and Navigation Gate	RD No. 2096	San Joaquin River	Good	General maintenance is required.
Gomes Lake Pumping Plant	Turlock Irrigation District	San Joaquin River	Fair	Maintenance improvement noted.
RD No. 2063 Pumping Plant	RD No. 2063	San Joaquin River	Fair	
Black Rascal Creek Drop Structure	Merced County	Bear Creek	Good	
Owens Creek Siphon Structure	Merced County	Owens Creek	Good	
Bear Creek Diversion Structure	Lower San Joaquin Levee District	Bear Creek	Fair	No significant change in previously reported erosion.
San Joaquin River Diversion Structure	Lower San Joaquin Levee District	San Joaquin River	Good	
Fresno River Drainage Structure	Lower San Joaquin Levee District	San Joaquin River	Good	
Ash Slough Drop Structure No. 1	Lower San Joaquin Levee District	Ash Slough	Good	

# Table 8. FLOOD CONTROL PROJECT STRUCTURES, 1974 (continued)

Structures	Maintaining Agency	Stream	Condition	Remarks
Ash Slough Drop Structure No. 2	Lower San Joaquin Levee District	Ash Slough	Good	
Ash Slough Drop Structure No. 3	Lower San Joaquin Levee District	Ash Slough	Good	
Ash Slough Drop Structure No. 4	Lower San Joaquin Levee District	Ash Slough	Good	
Mariposa Bypass Drop Structure	Lower San Joaquin Levee District	Mariposa Bypass	Good	
Eastside Bypass Drop Structure	Lower San Joaquin Levee District	Eastside Bypass	Fair	Deterioration of concrete on the floor of the
Chowchilla Bypass Drop Structure	Lower San Joaquin Levee District	Chowchilla Bypass	Good	stilling basin.
Mariposa Bypass Automatic Control Structure	Lower San Joaquin Levee District	Mariposa Bypass	Good	
	Lower San Joaquin Levee District	Eastside Bypass	Good	
Chowchilla Bypass Control Structure	Lower San Joaquin Levee District	Chowchilla Bypass	Good	
San Joaquin River Control Structure	Lower San Joaquin Levee District	San Joaquin River	Good	
	Fresno Irrigation District	Little Dry Creek Outlet Channel	Good	
Little Dry Creek Drop Structure No. 2	Fresno Irrigation District	Little Dry Creek Outlet Channel	Good	
Little Dry Creek Drop Structure No. 3	Fresno County	Little Dry Creek Outlet Channel	Good	
Little Dry Creek Drop Structure No. 4	Fresno County Irrigation District	Little Dry Creek Outlet Channel	Good	
Little Dry Creek Drop Structure No. 5	Fresno County	Little Dry Creek Outlet Channel	Good	
Little Dry Creek Outlet Wasteway	Fresno County Irrigation District	Little Dry Creek Outlet Channel	Good	
Reservoir Spillway	Fresno County Irrigation District	Big Dry Creek Reservoir	Good	No flow to date.
Dog Creek Outlet Control Structure	Fresno County Irrigation District	Dog Creek	Good	
Big Dry Creek Outlet Control Structure	Fresno County Irrigation District	Big Dry Creek	Good	
Little Dry Creek Out- let Control Structure	Fresno County Irrigation District	Little Dry Creek	Good	

Table 9. CHANNEL CLEARANCE AND CONDITION, 1974

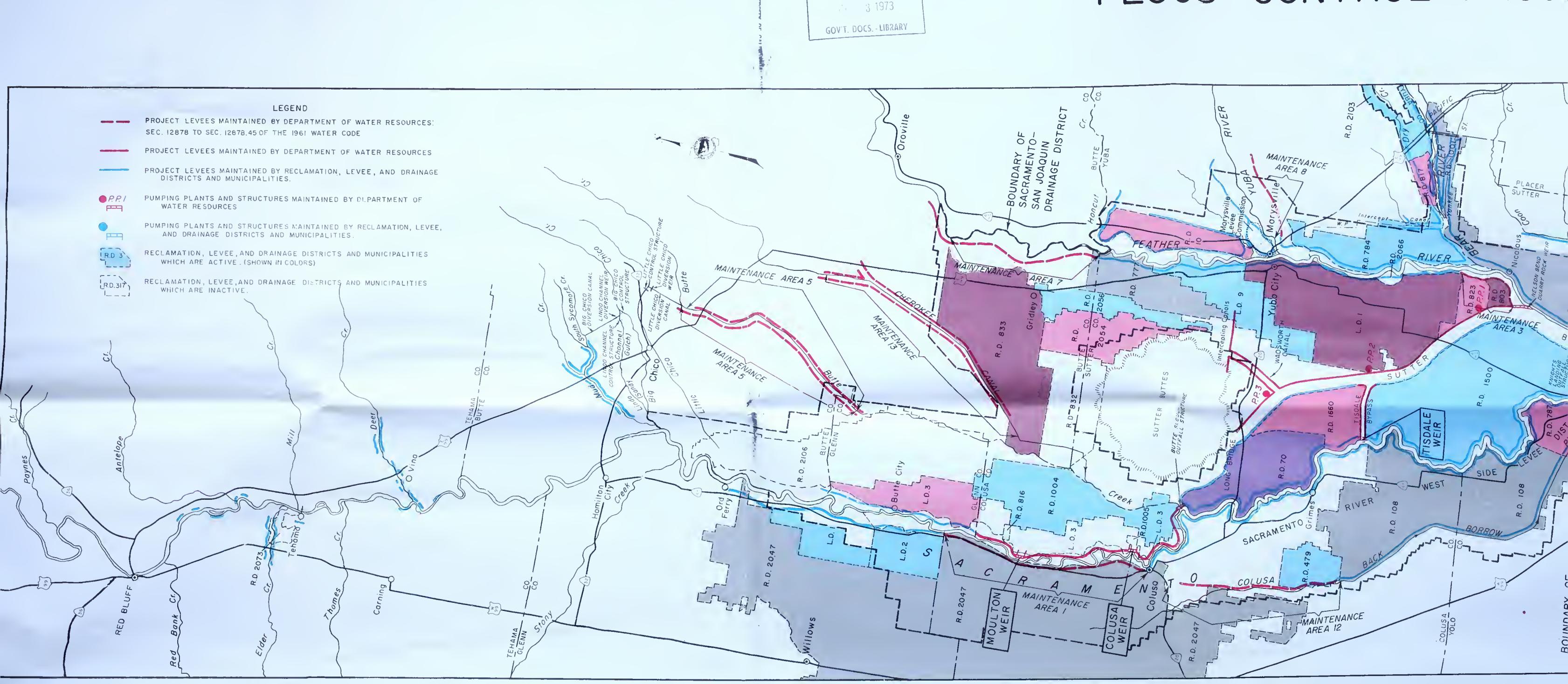
	Maintaining Agency	Clearance, in acres		Overall Condition
Stream		Reclear	Brush Control	of Channel
SACRAMENTO VALLEY FLOOD CONTROL PROJECTS				
1		0	0	Satisfactory
American River Arcade Creek	DWR DWR	2	2	Satisfactory
Bear River	DWR	263	0	Satisfactory
Butte Creek	DWR	0	0	Satiafactory
Butte Slough (to Mawson B.)	DWR		_	Satisfactory
Cache Creek Cache Creek Settling Basin	DWR DWR	65	0	Satisfactory Satisfactory
Cherokee Canal	DWR	109	0	Satisfactory
Big Chico Creek	DWR	0	30	Satisfactory
Big Chico Creek Diversion	DWR	0	0	Satisfactory
Little Chico Creek	DWR	0	0	Satisfactory
Colusa Basin Drain Colusa Bypasa	DWR DWR	200	0	Satisfactory Satisfactory
Deer Creek	DWR	145	ŏ	Satisfactory
Dry Creek (Bear River)	DWR		_	Satisfactory
Elder Creek	DWR	0	0	Satiafactory
Feather River	DWR	0	690	Satisfactory
Honcut Creek	DWR DWR	0	0	Satisfactory Satisfactory
Knights Landing Ridge Cut Linda Creek	DWR	0	ľ	Satisfactory
Lindo Creek	DWR			Satisfactory
Magpie Creek	DWR			Satisfactory
McClure Creek	Tehama County			Satisfactory
Mud Creek	DWR DWR	0	0	Satisfactory
Natomas Cross Canal Natomas East Canal	DWR	"	0	Unsatisfactory Satisfactory
Putah Creek	DWR	0	0	Satisfactory
Sacramento Bypass	DWR	10	114	Satisfactory
Sacramento River	DWR	452	21	Satisfactory
Salt Creek	Tehama County	150	30	Satisfactory
Sutter Bypass (Mawson BSouth	DWR DWR	130	164	Satisfactory Satisfactory
Tisdale Bypass Wadsworth Canal	DWR	10	0	Satisfactory
Western Pacific Interceptor	DWR			Satisfactory
Willow Slough	DWR	0	0	Satisfactory
Yolo Bypass	DWR	150	150 101	Satisfactory
Yuba River	DWR	101	101	Satisfactory
SAN JOAQUIN VALLEY FLOOD CONTROL PROJECTS				
Ash Slough	LSJLD			Satisfactory
Bear Creek (Merced County)	LSJLD MID	35	167	Satisfactory Satisfactory
Bear Creek (Merced County)   Bear Creek (San Joaquin County		6	100	Satisfactory
Berenda Slough	LSJLD	-		Satisfactory
Big Dry Creek	FID			Satisfactory
Black Rascal Creek Diversion	MID		92	Satisfactory
Burns Creek Chowchilla Bypass	MID LSJLD		290	Unsatisfactory Satiafactory
Dog Creek	FTD		2,0	Satisfactory
Duck Creek Diversion	SJCFCD			Satiafactory
Eastside Bypass	LSJLD		290	Satisfactory
French Camp Slough	None			0-11-0
Little Dry Creek	FID	18	100	Satisfactory Satisfactory
Littlejohna Creek Mariposa Bypass	SJCFCD LSJLD	10	100	Satisfactory
Maripose Creek	MID	10	1	Satisfactory
Miles Creek	MID	0	8	Satisfactory
Mormon Slough	SJCFCD	8	125	Satiafactory
Owens Creek	LSJLD			Satisfactory
Owens Creek Diversion	MID None			Satiafactory Unsatisfactory
Paradise Cut San Joaquin River (Merced Rive				O. Da Ci di actory
to Mosadale)	None			Satisfactory
San Joaquin River (Merced Rive	er	/ 6.0		
to Mendota Dam)	LSJLD	480		Satisfactory
San Joaquin River (Mendota Dan	n None			Satisfactory
to Chowchilla Canal Bypass) San Joaquin River (Chowchilla	None			Sacisfactory
Canal Bypass to Gravelly For	rd) LSJLD	0		Satiafactory
Stanialaua River	None			Unsatisfactory
MISCELLANBOUS FLOOD CONTROL PROJECTS				
Middle Creek and Tributaries	DWR	60	212	Satisfactory
Truckee River	Placer County			Satisfactory
TO TAY		2 27/	2,687	
TOTAL		2,274	2,007	





### STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES

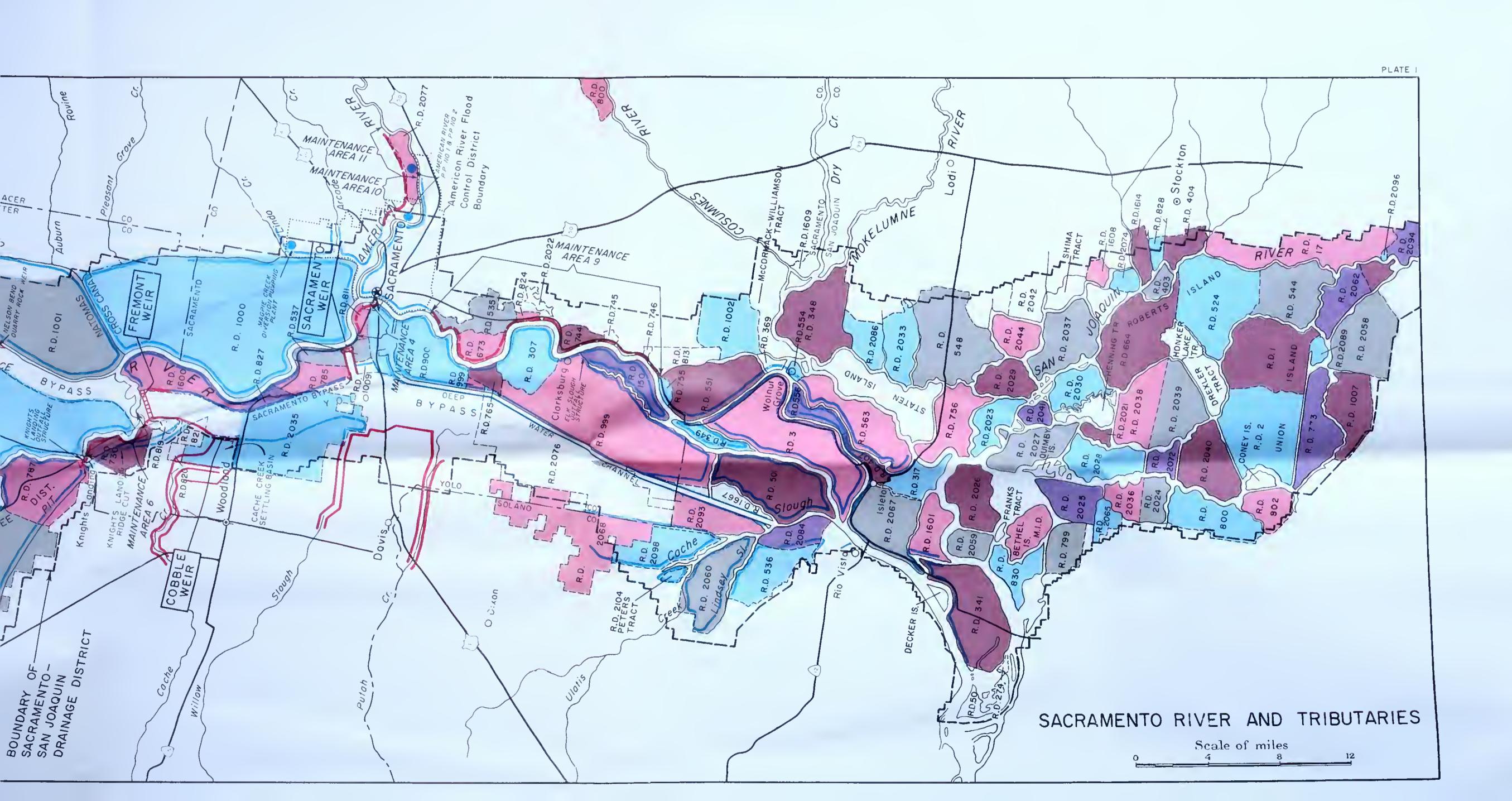
#### SACRAMENTO AND SAN JOAQUI FLOOD CONTROL PROJE



UNIVERSITY OF CALIFORNIA

# OUIN RIVERS DJECT

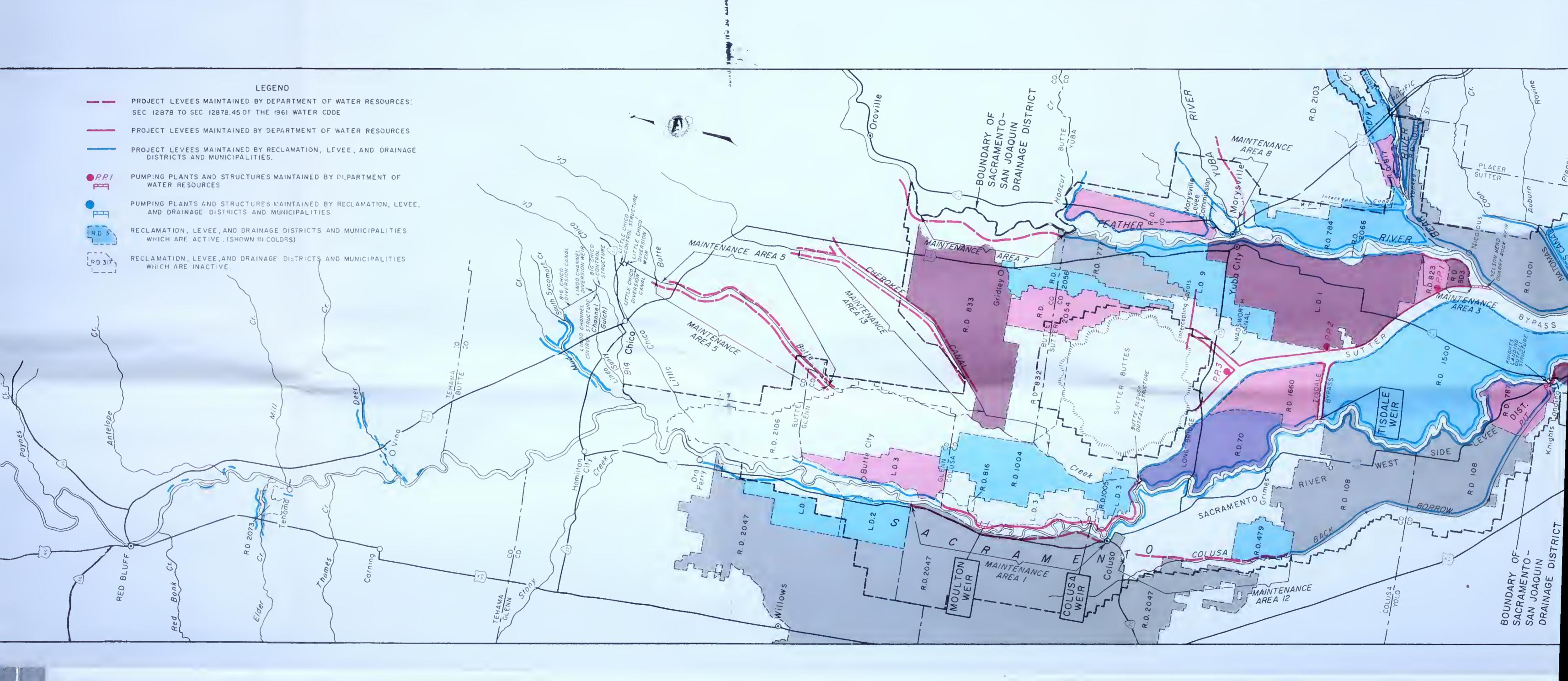
### PROJECT WORKS AND MAINTAINING AGENCIES - 1973-74





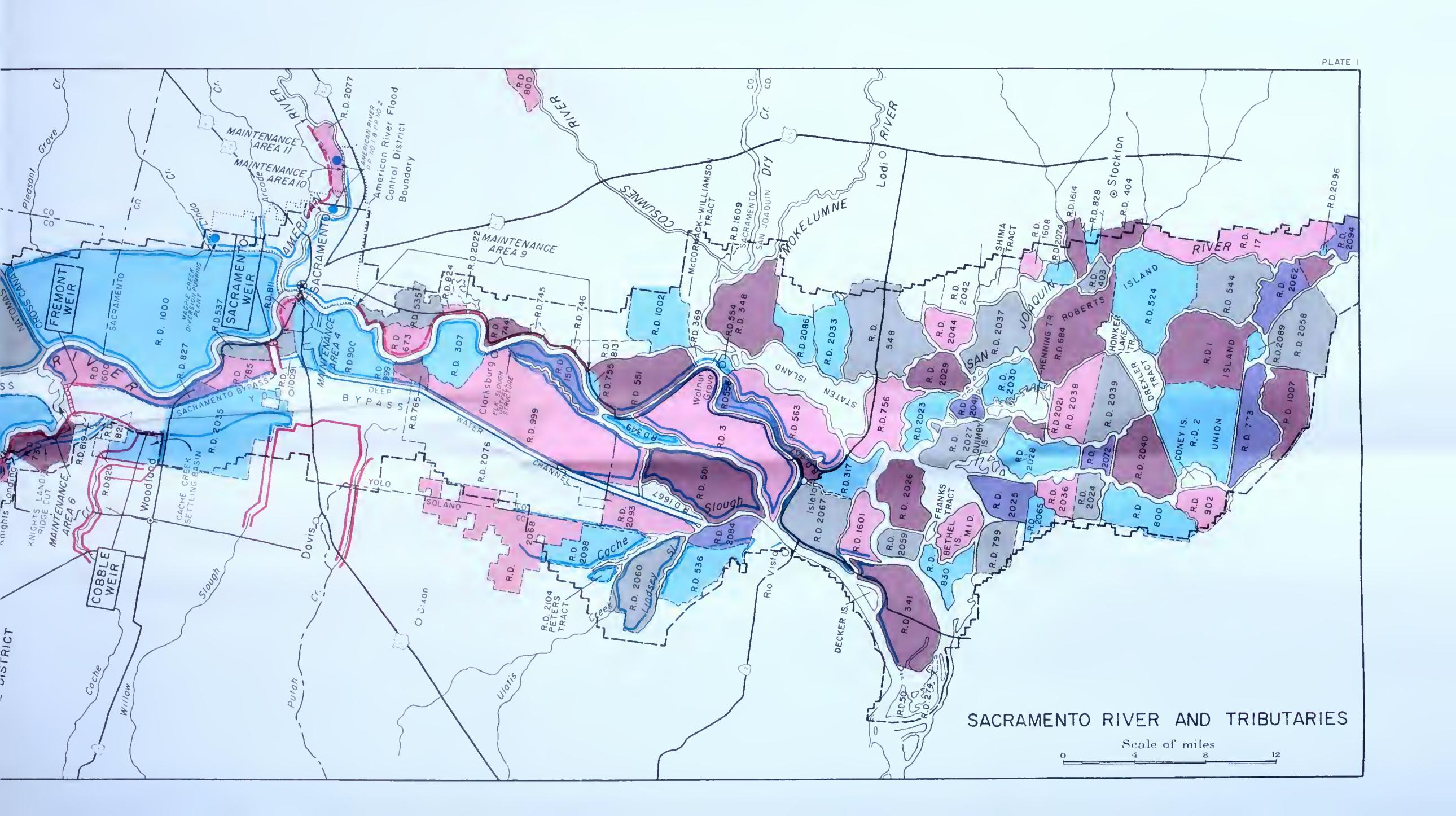
### STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES

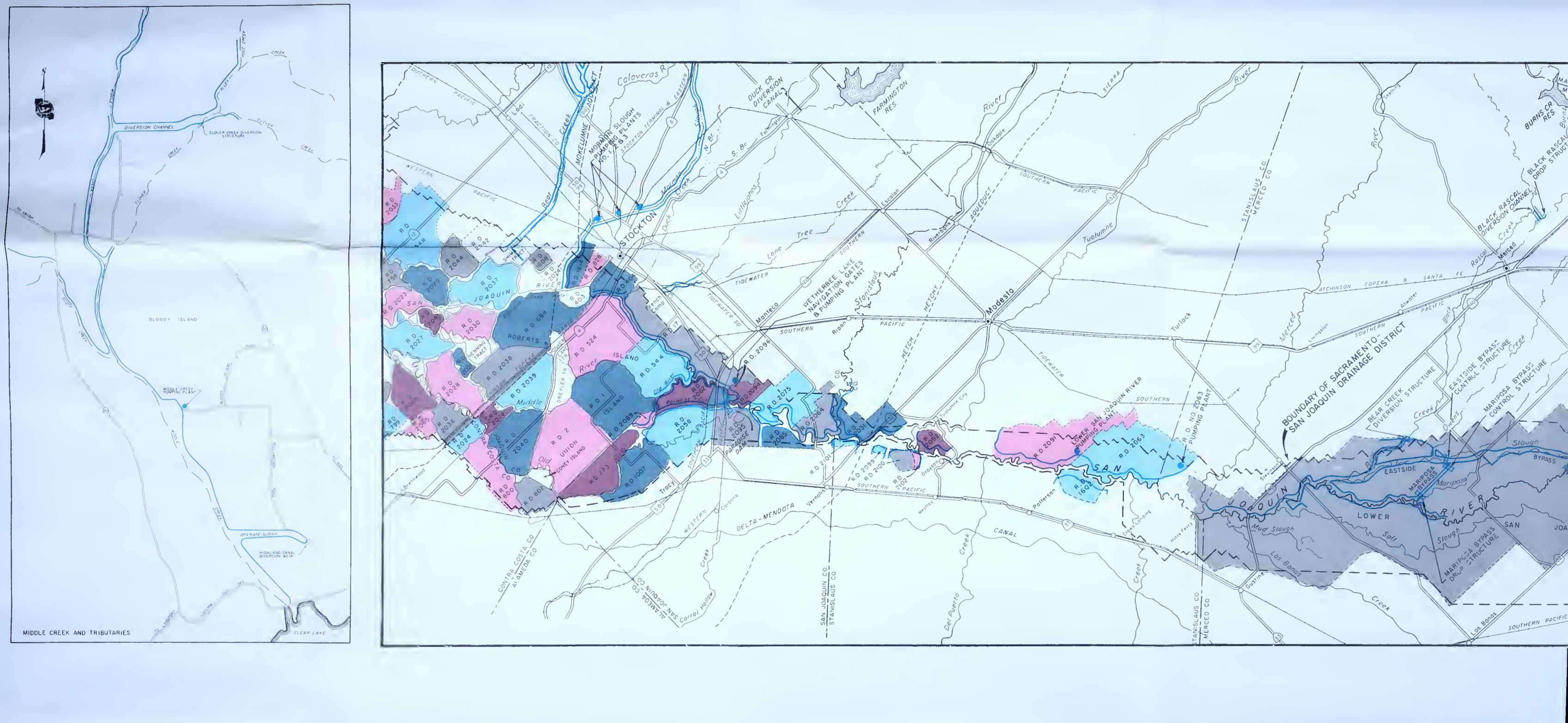
#### SACRAMENTO AND SAN JOAQUIN FLOOD CONTROL PROJEC

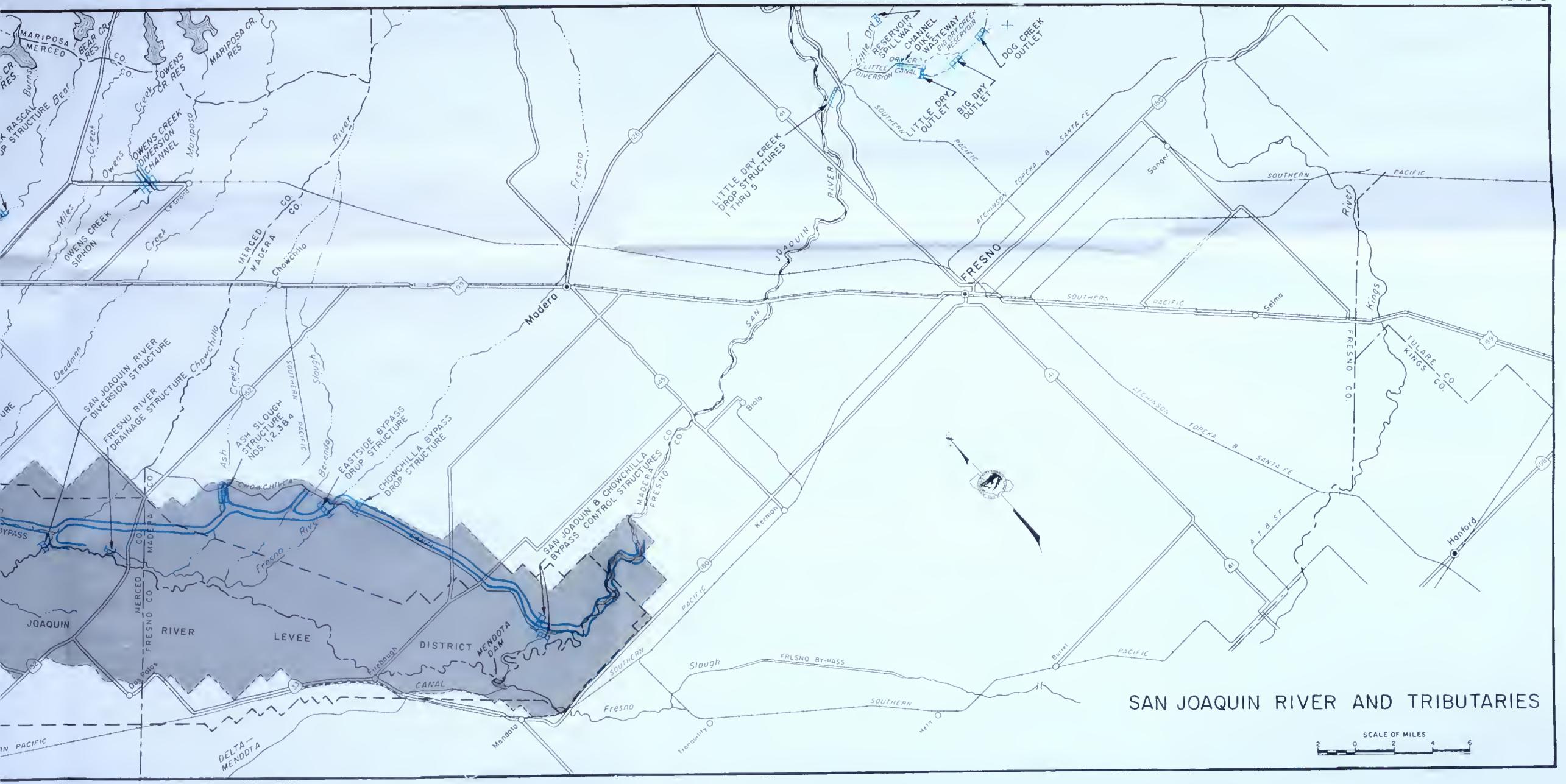


## I RIVERS CT

### PROJECT WORKS AND MAINTAINING AGENCIES - 1973-74







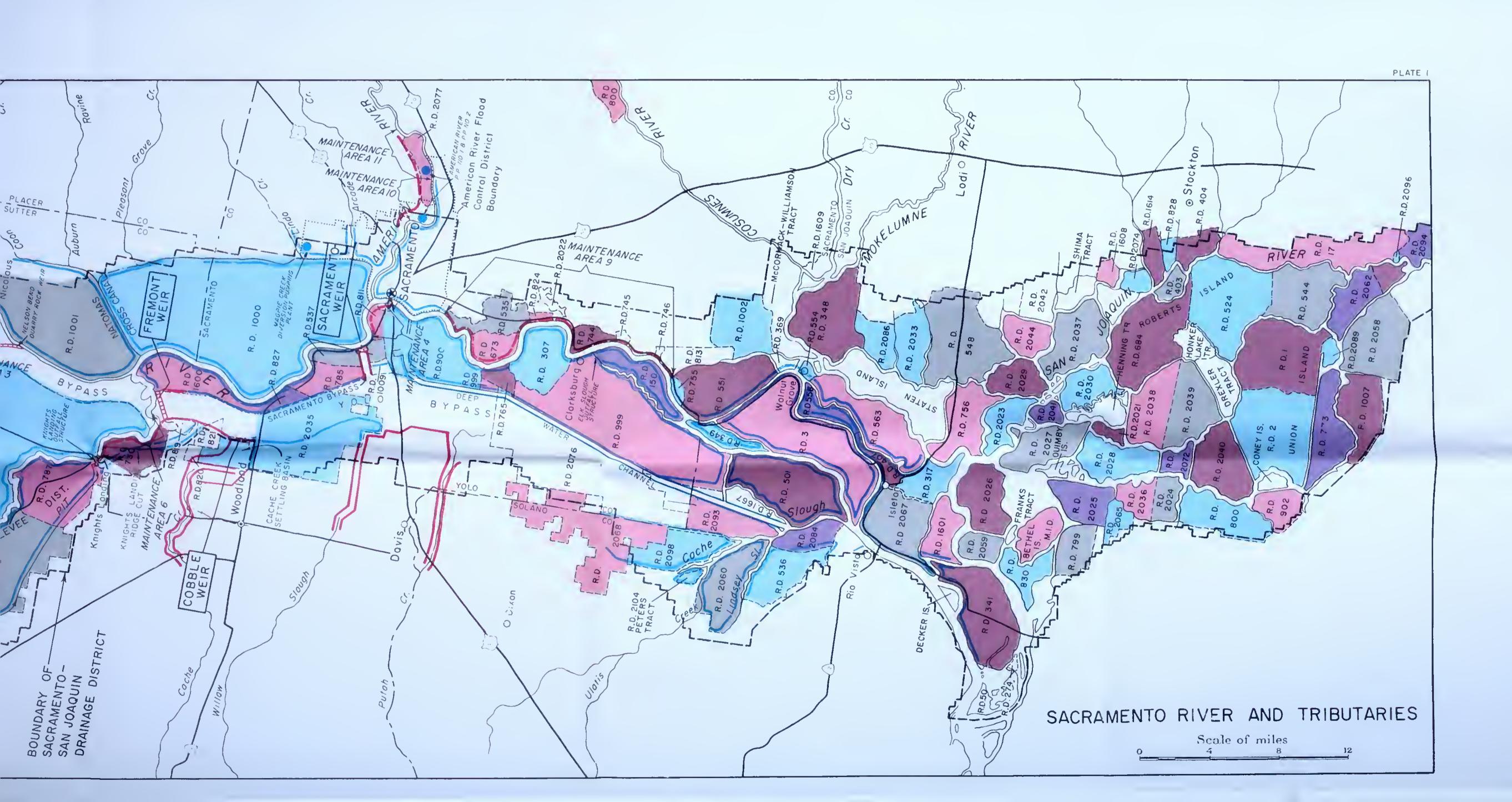
### STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES

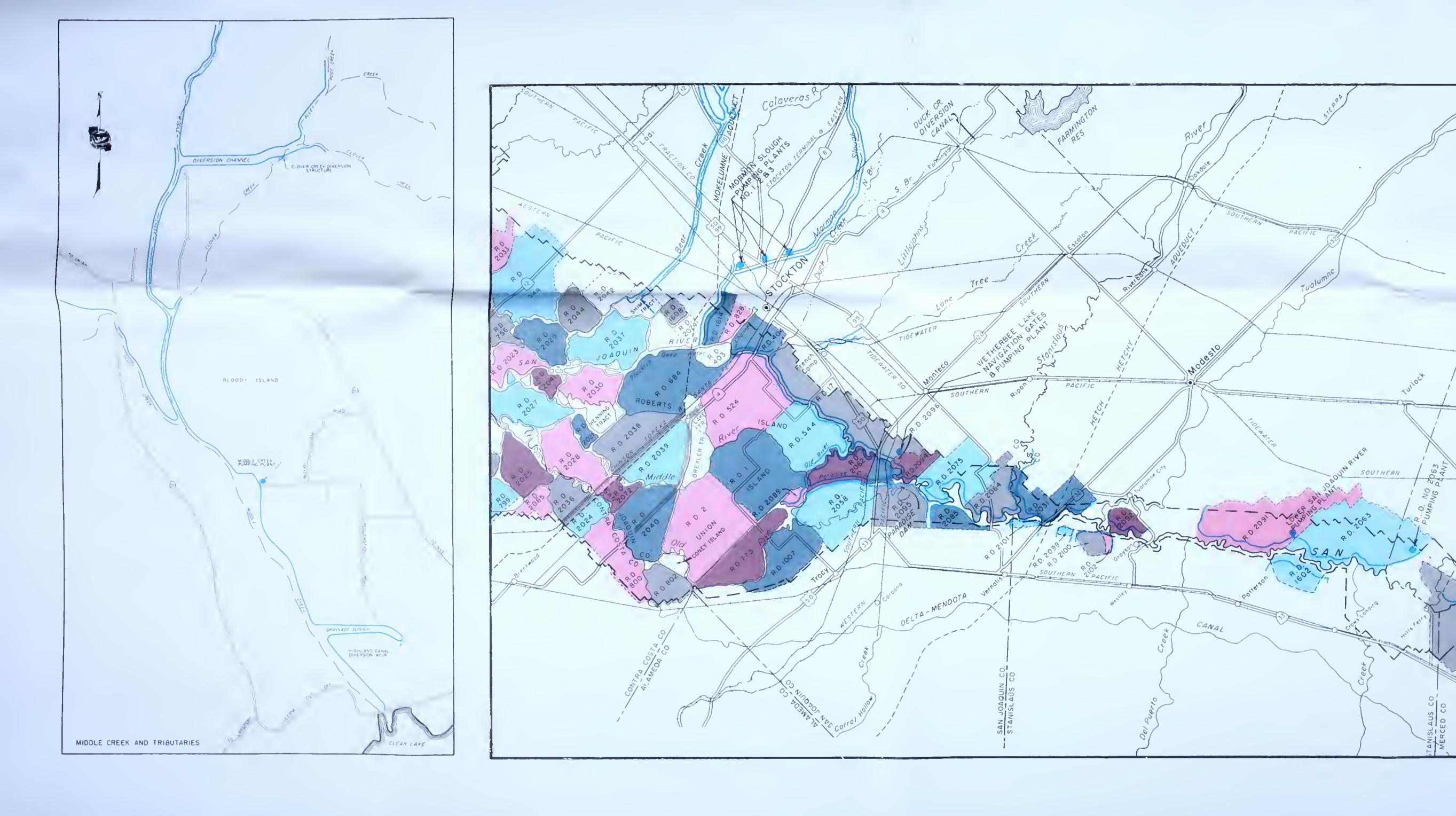
## SACRAMENTO AND SAN JOAQ FLOOD CONTROL PRO

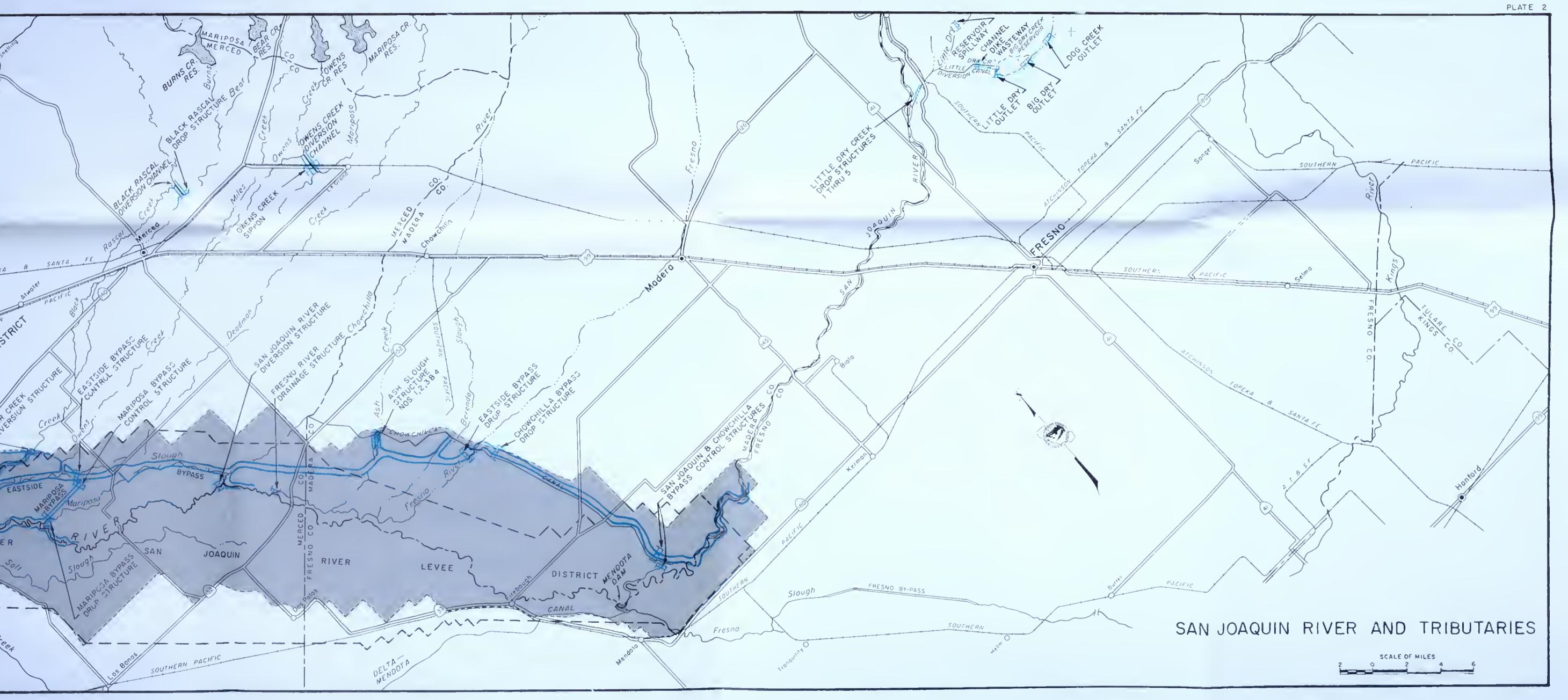


# QUIN RIVERS OJECT

### PROJECT WORKS AND MAINTAINING AGENCIES - 1973-74







#### THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

BOOKS REQUESTED BY ANOTHER BORROWER ARE SUBJECT TO RECALL AFTER ONE WEEK. RENEWED BOOKS ARE SUBJECT TO IMMEDIATE RECALL

LIBRARY, UNIVERSITY OF CALIFORNIA, DAVIS

D4613 (12/76)



